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CANADIAN NORTHERN RAILWAY COMPANY'S GRAIN ELEVATORS AT PORT ARTHUR, ONT.

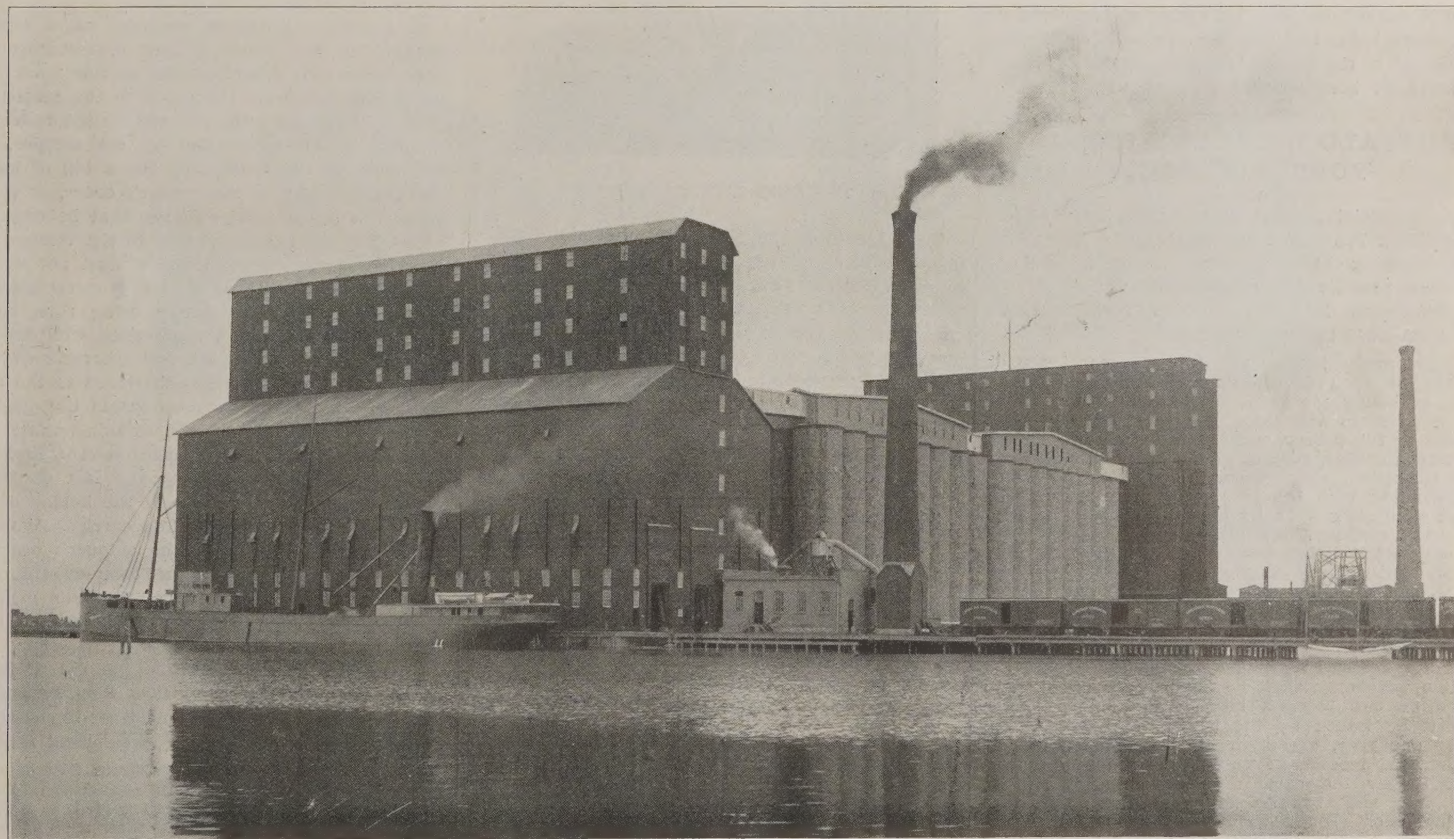
In point of equipment for the rapid and economical handling of grain the Canadian Northern Railway Company's plant at Port Arthur, Ontario, Canadian "Head of the Lakes," is without equal

of 10,000 bushels per hour; and all may be used for shipping grain to boats, if necessary, which would give a capacity for shipping from each working house of 100,000 bushels per hour. Usually, however, five are in use for unloading cars. When this is being done the shipping capacity is reduced to 50,000 bushels per hour.

Unloading Cars.—Two tracks are provided with

from 250 to 300 cars in ten hours. The unloading of the cars in no case interferes with the shipping.

Cleaning.—The number of cleaners in each working house is five No. 9 Monitor Cleaners, each having a capacity of 1,500 to 2,000 bushels per hour, according to the character of the work. No extra charge is made for this work, the revenue derived from the sale of the screenings being suffi-



THE CANADIAN NORTHERN RAILWAY COMPANY'S GRAIN ELEVATORS AT PORT ARTHUR, ONTARIO.

Designed and erected by the Barnett & Record Company, Minneapolis.

on the American continent. It consists of two working houses and two storage plants, with a combined storage capacity of 6,350,000 bushels. Each of the working plants may be worked separately or in conjunction with one another. Each of the working houses has ten legs, with a capacity

sufficient capacity outside of the building to hold 15 cars each. Five cars are brought forward on each track alternately and unloaded by means of the Clark Automatic Shovel, the unloading capacity of each building being $12\frac{1}{2}$ to 15 cars per hour, or a combined total for both buildings of

cient to meet this part of the operating expense.

Drying Plant.—There is now in course of erection a drying plant, which will be supplied with Hess Driers and Monitor Scourers. This house is connected with the main building by screw conveyor on bottom floor and by spouting from above.

Therefore, when this plant is completed, which will be in time for this year's crop, the Canadian Northern Railway will be able to take care of all damaged grain.

Storage Tanks.—These are composed of hollow tile reinforced by steel bands imbedded in concrete. They are circular in form, twenty-one feet in diameter and eighty-five feet deep, arranged in clusters of eighty, the interstices also being used. This construction is absolutely fireproof, there being no wood used.

For the purpose of filling one of these buildings there are provided five rubber conveyor belts, 36 inches wide, each with a capacity of 16,000 bushels per hour, each belt being provided with a self-propelling tripper for distributing the grain. In order to empty the tanks five conveyors are provided and placed in the tunnels below the bottom of the building. They are of the same material and form as the upper conveyors, with the exception that the belts are only 30 inches wide. They have a total capacity of 50,000 bushels per hour. This represents the total per hour that can be shipped from the storage building alone through any one working house. If both houses are working then double the amount can be shipped.

Dust Collecting System.—The working houses are equipped throughout with a dust collecting plant, devised and installed by Messrs. H. L. Day & Co. of Minneapolis.

Power Plant.—There is a separate power plant for each working house. Elevator A's equipment consists of one Wheelock Engine, 24x50 inches, with independent jet condenser, built by Messrs. Goldie & McCulloch, Galt, Ont., and is capable of developing 650 horsepower; one Ideal Generator, 9x10 inches, for lighting purposes; also one Northey Duplex Fire Underwriters' Pump, 10x10x12 inches, with a capacity of 1,000 gallons per minute. A battery of three boilers is provided, capable of carrying 125 pounds steam.

In the new building the power plant is similar to that in the old one, with the exception that there is one more boiler and that the engine is more powerful and of the duplex type and capable of developing 1,200 horsepower.

BUFFALO DELIVERY ON NEW YORK CONTRACTS.

At a special meeting of the grain trade of the New York Produce Exchange, held on August 23, the following change was made in Sec. III, Rule 5, making possible the much-discussed plan of delivering grain in Buffalo on New York contracts. The amended rule now reads:

Upon application of the owner or consignee of grain, or upon cancellation of the original lake bill of lading for grain in Buffalo by the agent of the Buffalo warehouse, the warehouseman shall issue to the person entitled thereto a warehouse receipt therefor, subject to the order of the owner or consignee, which receipt shall bear date corresponding with the receipt of grain into store; and shall state upon its face the quantity and inspected grade of the grain, and that the grain mentioned in it has been received into store to be stored with grain of the same grade by inspection, and that it is deliverable upon return of the receipt properly endorsed by the person to whose order it was issued, and the payment of charges for storage.

All warehouse receipts for grain issued from the same warehouse shall be numbered consecutively, and no two receipts bearing the same number shall be issued by the same warehouse during any one year, except in the case of a lost or destroyed receipt, in which case the new receipt shall bear the same date and number as the original, and shall be plainly marked on its face "duplicate." If the grain was received from canal boat or other vessel, the name of such craft shall be stated upon the receipt, with the amount it contained.

On the same day, the Buffalo grain elevators known as the Electric, Great Eastern, Mutual and Dakota (Western Elevating Association), which had applied for licenses under the rules of the New York grain trade, were declared regular at a special meeting of the board of managers. The combined capacity of these four grain warehouses is about

8,000,000 bushels, which compares very favorably with the capacity of the New York elevators.

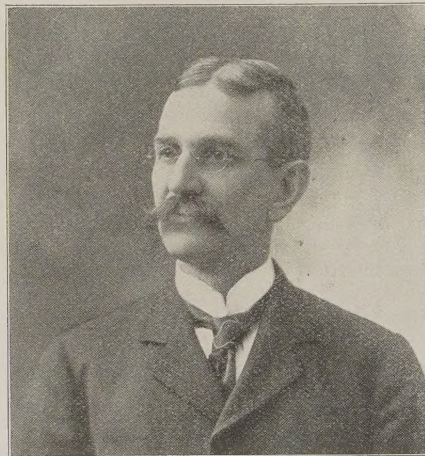
By the adoption of the above change the New Yorkers hope that the possibility of manipulating the New York grain market has been reduced to a minimum, owing to the largely increased supply of wheat deliverable on contracts. In addition to this feature, they believe the New York grain trade will be broadened, and that it may recover some of its former prominence.

J. HUME SMITH DEAD.

J. Hume Smith, who in 1900-01 served his third term as president of the Baltimore Chamber of Commerce, died in that city on September 5, of Bright's disease. He was in his fifty-eighth year.

Mr. Smith was born in 1847 in Southern Pennsylvania, and educated in the county schools previous to entering LaFayette College at Easton, Pa., in 1865, from which he was graduated in 1869. He taught school for a year before he came to Chicago, where in 1871 he was engaged with a book publishing house.

When the fire of October destroyed the business, Mr. Smith returned to the East. He still continued in the book business, but in 1873 went to Philadelphia, where he went into the clothing business.



THE LATE J. HUME SMITH.

On going to Baltimore, he went into the grain business, being with various firms until 1896, when he organized the firm of Smith, Gambrill & Co., of which he was president. They were in the export trade, and for some years did a big business. The company was recently compelled to liquidate.

He was Republican in politics, a Presbyterian in religion, and had a family of one son and eight daughters.

KANSAS GRADES.

The state grain inspection commission, at its recent meeting to establish grades governing the inspection of grain during the current year, made very few changes from the old rules. The weight test for No. 1 wheat was reduced from 62 to 61 pounds; and a few new grades were added, such as a grade for speltz and No. 4 and rejected grades for yellow corn.

The first crop scare report leveled at corn appeared on August 15. Corn was firing in the center of the corn belt of Illinois and Indiana. A few days later the entire corn area was treated to soaking rains.

An Illinois weather observer says that for the past twenty-five years the records show that the average date of killing frost in this state has been October 18. On one occasion frost fell on September 15, but this was in the northern part of the state, and at the beginning of the present record. In but four instances in twenty-five years has there been a killing frost from one to ten days before October 18.

CONCERNING BILLS OF LADING.

BY J. L. ROSENBERGER,
A Member of the Chicago Bar.

In an action relating to a shipment of wheat, the Court of Civil Appeals of Texas says (Grayson County National Bank vs. Nashville, Chattanooga & St. Louis Railway, 79 Southwestern Reporter, 1094) that a bill of lading represents the property, and any bona fide title for valuable consideration obtained through a pledge of the bill of lading is as valid and effectual a title to the goods as could be obtained by an actual delivery of the goods themselves. But a bill of lading, even when in terms running to order or assigns, is not negotiable like a bill of exchange, but a symbol or representative of the goods themselves; and the rights arising out of the transfer of a bill of lading correspond, not to those arising out of the indorsement of a negotiable promise to pay money, but to those arising out of a delivery of property itself under similar circumstances.

When the seller takes a bill of lading which expressly stipulates that the goods are to be delivered at the point of destination to himself, his order or assigns, there is the clearest evidence upon the face of the transaction that, notwithstanding such an appropriation of the goods as might have been sufficient to transfer the title to the buyer, the seller has determined to prevent this result by keeping the goods within his control. Where the bill of lading is taken to the seller's order or his assigns, the mere fact that the buyer is named as consignee will not pass title to him. When the bill of lading, taken to the order of the seller, is indorsed by him and attached to a draft upon the purchaser for the price and the draft is then delivered to a bank for collection, or is discounted by the bank in reliance upon the security of the bill of lading, no title passes to the purchaser until by payment of the draft he has duly obtained possession of the bill of lading.

As a bill of lading is regarded as a symbol standing in the place of and representing the property therein described, the carrier must bear the risk of delivering the goods to the person entitled to them under the bill and its indorsements. If there be no reservation by the shipper, the title rests in the consignee; but a bill of lading directing delivery to the vendor's order, or to his assigns, is prima facie evidence that he does not intend that the title shall pass to the vendee, and is notice to the carrier that he must not deliver to the consignee without the bill properly indorsed by the consignor. The carrier, being thus bound to deliver the goods in accordance with the bill of lading, is under obligation to ascertain whether or not a bill of lading was delivered to the shipper, and if delivered, he must retain the property until it is demanded by one claiming under that title. And where goods have been transferred from one carrier to another, the last carrier is bound to deliver the goods to the holder of the bill of lading issued by the first carrier. Where a bill of lading is taken to the shipper's order or assigns (as has become very common) in order to use it either as collateral or to obtain payment for the goods before delivery, the carrier will be liable for a delivery otherwise.

Eliminating the blanks from the bill of lading in this case (for, the court says, they were meaningless and were not to be considered in construing the instrument), the contract of shipment reads:

Received from the Sherman Grain Company the following packages (contents unknown), in apparent good order, to be transported to and delivered in like order to his or their assigns, he or they paying the freight and charges per margin.

The court thinks that if this authorized a delivery to any other than the assigns of the Sherman Grain Company, the English language is not to be trusted. When the writing on the margin was considered, this construction of the contract, otherwise clear and unequivocal, was rather strengthened than weakened. "S. W. 6,746" simply indicated, in the proper place, the number of the car in

which the wheat was shipped. The name and address of the consignee, written in the margin, could not by any rule of construction be read into the blanks appearing in the bill of lading, and thereby change this meaning so as to make an entirely different contract from that which the instrument showed upon its face was made between the parties, an inspection of the original bill of lading showing that there was ample space in the unfilled blanks to write the words; while it was to be presumed that they would have been written there if the contract made by the parties were such as required it. Furthermore, the court holds that evidence that, according to the rules, usages and customs of all railway companies, a bill of lading such as was involved in this case would be considered such as would authorize delivery by the carrier to the consignee named in the margin without production or surrender of the bill of lading, should not have been admitted and could not be considered, as usage and custom cannot make a contract, cannot prevent the effect of a settled rule of law, nor be invoked by

CYCLONE DAMAGE AT MINNEAPOLIS-ST. PAUL.

The great storm of August 20-21, which brought rain to the greater part of the Northwest, developed a cyclone at Minneapolis-St. Paul on the night of August 20, which, striking the Minnesota Transfer at Merriam Park, lying between the two cities, damaged Northwestern Elevator No. 1, near University Avenue Bridge. Five stories were blown off the building and the machinery of the top story hurled into the body of the house. A smaller elevator standing near by, known as No. 2, was lifted from its foundation and, being empty, was overturned and completely destroyed. The loss on the two elevators is estimated by the owner at \$50,000, with no tornado insurance. No. 1 also contained very little grain, except flax, and not a great deal of that.

The accompanying illustrations show in the most graphic manner the havoc wrought by the storm. Figure 1 shows the main, or No. 1, elevator (with annex) of the Northwestern Elevator Company,

The St. Anthony and Dakota Elevator Co.'s annex to No. 1 house lost 250 to 300 feet of its roof. It contained about 100,000 bushels of wheat, which was not, however, much damaged, the roof being covered immediately. The loss here is set at \$10,000.

The Interior Elevator of F. H. Peavey & Co. also lost a part of its roof—about 100 feet—and the Exchange Elevator Co.'s house suffered to a less extent, about half of the roof of the annex being carried away.

There were still lesser losses to Elevator H of the Great Eastern Elevator Co., Electric Steel Elevator Co., Elevator C of the Empire Elevator Co. and Elevator X of the Bagley Elevator Co.

Some of the houses carried tornado insurance and thus escape loss.

WEIGHING AT KANSAS CITY.

On the complaint of the railways of Kansas City, that the Board of Trade rule requiring all grain entering that terminal to be weighed and the weights



THE NORTHWESTERN ELEVATOR COMPANY'S HOUSES NEAR MINNEAPOLIS, AFTER A CYCLONE.

a party and introduced into a contract as an element of it when such usage or custom is contrary to law.

A stipulation in the bill of lading for notice of claim within 90 days, the court holds, was restricted to claims against the initial carrier and could not inure to the benefit of the terminal carrier; and it says it may be doubted whether such a stipulation has any application to a claim growing out of a failure to deliver the goods to the proper party under the bill of lading.

Last of all, the court holds that unless the carrier has contracted to carry the goods to their destination to fulfill a contract at a greater price, or knew of such contract, it cannot be charged with more than the market value of the goods, less freight charges, at their destination, by reason of its failure to deliver. The market price is the test by which to estimate the value of goods independently of any circumstances peculiar to the plaintiff, and so independently of any contract made by him for the sale of the goods.

Oatmeal millers prefer oats from Central Illinois because they are free from barley.

which was unroofed, the cupola, or Texas, of which was about fifty feet high and extended the entire length of the building, being carried away at the same time. The elevator contained at the time only about twenty thousand bushels of flax, and a section of the roof fell over the bins in which this was stored, keeping out the rain, so that the grain was practically undamaged. The shafting at the head of the elevator fell through to the floor, and part of the bucket belting was blown outside of the building and may be seen in the picture, several lengths hanging against the wall.

At the near end of Elevator No. 1 was house No. 2, shown in Fig. 2. This house was completely wrecked, being blown over on its side and coming apart in two places. The house contained no grain at the time. It was a cribbed elevator, and it must have been a terrific wind that could lift bodily a building constructed of such heavy timbers. Picture No. 3 shows the same elevator from the other end. No. 4 shows the bottom of the elevator and the foundation from which it was lifted.

The roofs were blown off of several freight cars standing near, while some poorly constructed sheds not far away showed no effects of the storm.

supervised by Board of Trade men was causing a congestion of cars at that market, the Board on August 23 suspended the rule for 30 days, so far as through-system cars are concerned.

The weighing rule requires railroads to measure all wheat brought in by the Kansas City Board of Trade weights. The railroads made complaint that the enforcement of this rule caused delays in the handling of grain there, because it made it necessary to transfer the grain. It was also agreed by the Board and the railroads that 3 o'clock p. m. on trading days should be the hour for the collection of bills of lading and orders for all shipments. Heretofore, the railroads say, they have been handicapped by the non-receipt of "dispositions"; but, they say, they now believe that by a prompt delivery of orders at the specified hour they will be able to move the grain cars and accomplish the end sought by the Board of Trade—quick delivery.

A North Dakota judge has decided (case against the St. Anthony and Dakota Elevator Co.) that the tax levied on grain in store at April 1 must be paid by the elevator operator, notwithstanding the grain may then have been sold to ex-state buyers.

EXPORTATION OF CORN FROM THE ARGENTINE.

[Extracts from Report No. 75, U. S. Dept. of Agriculture, entitled "Indian Corn in Argentina: Production and Export," by Frank W. Bicknell. Editor's condensations enclosed in []'s.]

The facilities for handling grain in Argentina are inadequate, causing delays and losses, and increasing the burden which the producer must bear in getting his crop to market. Shippers must nearly always wait some days to obtain cars, which are distributed by towns, and the railway companies generally require shippers to state what ship the consignments are intended for before cars will be given them in the country stations to load for the seaports, Buenos Aires, Rosario, Bahia Blanca, or La Plata, especially the first named. The docks are so crowded during the busy seasons that the railway companies try to provide cars first for those who have ships ready to load, preventing speculators from cornering the market and filling the yards with grain in order to compel shippers who have ships waiting to pay them an exorbitant price for the grain they must have.

The cars are now being made larger, and several of the principal lines have many 35- and some 40-ton cars; but there are still very many 10- and 15-ton English cars in use. Nearly all the railways are owned and, except for minor positions, operated by Englishmen. The railway companies allow three days for unloading cars, for which no extra charge is made; after that, \$1.70 per day. The port of Buenos Aires allows six days' free use of its yards for cars unloading; after that there is a yardage charge of 85 cents per axle, the cars having, according to their capacity, from two to four axles. No switching charge is made. Weighing is 12 cents per ton and loading on shipboard costs about 18 cents per ton.

[The ocean ports are Buenos Aires and Bahia Blanca. The former is often badly congested, when steamers have the "right of way" for loading berths. Bahia Blanca is the great ocean port, with immense advantages over Buenos Aires, in having always deep water, while the latter city, being on the Plate River, requires constant dredging to prevent delays by low water. At both ports large improvements to docks, moles and the channel are in contemplation—at Buenos Aires by the government and at Bahia Blanca by the Great Southern Railway Company. The great river port, the next greatest shipping port to Buenos Aires, is Rosario, about 200 miles up the Plate River from Buenos Aires. Here ships drawing 24 feet of water can load, lying out in the stream, by means of long chutes from the warehouses on the high banks. The docks here are to be built by a private company, which will be recouped by the dock and custom house fees for a term of years, the government agreeing only to keep open a 24-foot channel to Buenos Aires. At present there is only an 18-foot channel, so that steamers out must complete their cargo at Buenos Aires and unload part there when coming in. The improvements at Rosario are expected to develop other grain ports along the river, owing to the high fees that the improvement company expects to charge.]

No conveniences for loading grain are provided in the country stations. There are no elevators and few warehouses, the latter almost invariably owned by private parties, usually buyers for their own use. There is no public storage for hire, to amount to anything, and if there was the farmers could not be persuaded to pay anything for the use of it. They are very much averse to paying out a single cent that can be avoided; they have not been educated up to the point of spending 10 cents to save \$2, and they follow the practice of losing the \$2 nearly every time. Grain is generally piled up in bags in the station yards, if cars are not ready, and it often suffers damage. Some of the railway companies, especially the Great Southern, have erected sheds for grain. The Argentine Congress has just passed a law requiring all railway companies to provide free shelter for grain offered for shipment. The law went into effect on September 17, 1903, and allows the railway companies

eight months in which to build sheds in all stations in the agricultural regions, as directed by the Department of Public Works. At the end of this time the railways will be liable for heavy penalties for failure to provide sheds, and are liable for all damages to grain offered for shipment that is due to lack of sheds. The railways are prohibited from making any charges for storing grain offered for shipment. This law is the outgrowth of the shortage of cars for handling the rapidly increasing grain business, and is intended to force the railway companies to handle the traffic more promptly. Elevators are now being considered and will be built within a few years, as soon as mixed farming becomes more settled and it is possible to say with more certainty what a section of the country will produce to give business for an elevator for any number of years together. Immense elevators are now being built in Buenos Aires and Bahia Blanca. There are several in Rosario, but they have not been in general use for several years. It is claimed the charges were prohibitive. One of them has been used by a corn-shipping firm for cleaning and drying corn, and with excellent results.

METHODS OF LOADING AND SHIPPING.

Corn is usually exported from Argentina in bags of about 155 pounds weight. A year ago it was estimated that 90 per cent of the exportation was in bags and only 10 per cent in bulk. The proportion of bulk shipment is now somewhat greater. Sometimes cargoes contain both bagged and loose corn. In case of separate parcels in a ship belonging to different shippers, the bags are marked and piled separately.

In Buenos Aires and La Plata bags are either carried on board by men or swung on from cars alongside the docks by hydraulic cranes or steam winches. Corn to be shipped in bulk is always carried on board in bags and the bags cut open and emptied into the hold.

In Rosario several means are employed, chiefly the "canaletas," which are long, wooden chutes made in sections and swung on cables from the elevator or warehouse on the high bank to the ship lying in the stream below. In some cases grain has been loaded in bulk by the same system, with spots. In another part of the port, where there are no high banks, the hydraulic crane and steam winches are used. In the smaller ports on the Parana and Uruguay rivers the "canaletas" are used.

At Bahia Blanca grain is loaded by steam winches from the cars, by men carrying the bags on board, and by a system of endless chains, carrying the bags a distance of about 100 feet from the cars to the ship's side, where they are slid into the hold. For handling in the dock the charge is 35 cents gold per metric ton of 2,204.6 pounds. For handling from the deck, either putting bags in the hold or cutting bags open and allowing the contents to fall into the hold, the charge is 16 cents gold per ton. The commercial seaport of Bahia Blanca is 4.35 miles from the city. The railway company charges 65 cents gold per ton for switching cars from the city yards to the shipping port. Another railway company has a mole also, and the switching charge between this mole and the city, 9.31 miles, over two railways, is \$1.36 gold per ton. The endless chains, working on two ships at a time, loading into all hatches, expect to load 1,500 tons of grain per day into a ship. It is a very dusty place, full of fine sand, which is very damaging to exposed machinery like this. The facilities are greatly inadequate, but extensive improvements now under way include huge elevators, large docks in addition to the present steel mole, and modern equipment for loading in bulk. The whole system is owned by the Great Southern Railway Company, the principal railway of South America, which controls transportation in the best part of Argentina, and is giving serious consideration to the construction of grain elevators and warehouses. Some lightering is done at Bahia Blanca when the mole is crowded and ships are waiting. The lighters are of 350 tons burden and the charge is 30 cents per ton. The bags are lifted from the

lighters by steam winches on board the ships. Portable elevators are never used.

Corn exported from Argentina to Europe and England is generally carried in tramp steamers of from 2,500 to 6,000 tons burden, that require about thirty-five days for the voyage. Some shipments are made in liners or mail steamers, requiring only twenty-one to twenty-four days for the voyage. A very small amount goes in sailers, which require seventy to one hundred days to go to Europe, quite too long for grain shipments. Liners are preferred on account of their quick service, and they often take corn at low rates for ballast when the freight market is dull. Sailing vessels take corn to South Africa because, owing to favorable winds, they are able to make the voyage from the River Plate in twenty-five to twenty-eight days. Steamers do it in fifteen to eighteen days—usually fifteen.

The condition of the freight market constantly varies. Crop conditions, the wool market, favorable weather for handling corn, the demand for tonnage to Brazil and South Africa, as well as to the River Plate countries—all these things and other influences affect the supply, character and price of tonnage from Argentine ports to Europe.

Liners bring general cargoes from Europe and carry back grain, hay, frozen or chilled meat, and other produce. They cannot wait for cargoes, hence sometimes make liberal offers for business. Tramp steamers do a great variety of things, as the season and conditions suit them. If they are assured in advance of a profitable return cargo they will come out from Europe in ballast, when the demand for tonnage for other parts of the world permits them to do so. Frequently they bring coal, and sometimes general or special cargoes. Often they bring cargoes to Brazil and go to the River Plate, 1,100 miles, or five days' voyage in ballast. Recently quite a number have been going to South Africa loaded and crossing to Argentina in ballast. Sailors go in ballast to some United States or Canadian port and load lumber for Argentina.

Sometimes temporary wooden bulkheads are put in front of the engine room, leaving an air chamber a foot wide, which is kept full of fresh air to prevent heating the corn. But this is an unusual precaution, not the rule. Indeed, it is claimed that the corn net to the bulkheads, where there is most heat, often comes out the best. Occasionally a ship will be lined with straw matting or matting made of the tall rushes that grow in the Parana River, but this also is the exception, especially as most of the corn is bagged.

FREIGHT RATES.

Freight rates in Argentina are high, compared with the United States. The railways, being nearly all English and owned by the same group of capitalists, have long and very favorable concessions from the federal government, under the supervision of which they all are. The rates on corn on one of the principal lines were as follows in 1902:

Number of miles	Rate per bushel in United States cents.	No. of bushels carried for 41 cents at bushel rate.
25.....	2.74	14.96
50.....	3.92	10.45
100.....	6.10	6.72
200.....	8.92	4.59
300.....	11.03	3.71
400.....	12.99	3.15
500.....	14.38	2.85
600.....	15.76	2.60
700.....	17.13	2.39
800.....	18.50	2.21
900.....	19.87	2.06

These rates are a trifle higher than those in force on some other lines traversing corn regions. Rates on Argentine railways are quoted in Argentine gold per 1,000 kilos (2,204 pounds), and are divisible in fractions of 10 kilos. Very little corn in Argentina is shipped more than 200 miles by railway, and most of it less than 100 miles.

OCEAN FREIGHT RATES.

Ocean freight rates on corn from River Plate ports vary considerably according to the condition of the freight market. Now the range is from 8 to 20 shillings per shipping ton of 2,200 pounds.

The charter rate from Buenos Aires, in good tramp steamers, is at present about 13 to 17 shillings per ton. From upriver points, such as Rosario or San Lorenzo, the rate is usually one shilling sixpence to three shillings higher because steamers may not always load to their limit there, but must stop at Buenos Aires to finish. They cannot get across the bars on the way down with a full load drawing more than 18 feet, except at unusual stages of the river.

Rates in shillings per shipping ton of 2,200 pounds converted into cents per bushel, United States money, are as follows; 8s per ton equals 4.95c per bu., 10s per ton equals 6.19c per bu., 12s per ton equals 7.43c per bu., 14s per ton equals 8.67c per bu., 15s per ton equals 9.29c per bu., 16s per ton equals 9.91c per bu., 17s per ton equals 10.53c per bu., 18s per ton equals 11.15c per bu., 20s per ton equals 12.38c per bu.

EXTENT OF EXPORTS OF CORN FROM ARGENTINA.

Argentine exportation of corn from 1886 to 1902, inclusive, has been as follows, in bushels, with the valuation in United States money:

Calendar years.	Quantity. Bushels.	Value.
1886.....	9,119,970	\$ 4,490,551
1887.....	14,245,035	6,983,595
1888.....	6,389,699	5,253,908
1889.....	17,030,168	12,523,501
1890.....	27,844,175	13,650,542
1891.....	2,594,692	1,335,645
1892.....	17,555,505	8,261,588
1893.....	3,327,135	1,523,296
1894.....	2,160,370	1,009,397
1895.....	30,404,504	9,836,571
1896.....	61,827,888	15,434,756
1897.....	14,760,664	5,286,963
1898.....	28,230,887	8,949,600
1899.....	43,945,394	12,586,479
1900.....	28,079,045	11,516,066
1901.....	43,788,911	18,226,338
1902.....	46,959,122	22,189,268
1903 (estimated Nov. 5)...	78,750,000	31,500,000

The distribution of Argentine corn exports for 1902 to the several countries of destination is shown in the following table:

Destination.	Bushels.
United Kingdom.....	11,658,515
Germany.....	4,738,985
Belgium.....	4,252,870
France.....	2,046,066
Italy.....	956,914
Spain.....	305,731
Brazil.....	74,445
Other destinations a.....	4,166,497
For orders b.....	18,759,099

a Including all other European countries and South Africa.

b Cargoes going to St. Vincent to receive orders to proceed to some European or English port, where the cargo has been placed during the voyage from the River Plate to St. Vincent.

TREATMENT OF BARLEY.

The American Brewers' Review of Chicago has obtained from various sources some suggestive facts relative to the handling of barley after thrashing, both before and after it reaches the country elevator. The writers all unite in urging a most careful curing of the grain before storing it in bulk, and even in the country elevator it should be frequently elevated for aeration to prevent heating and to guard against weevil. If the grain is damp after thrashing, it should be put into shallow bins and turned over frequently for the same purpose, and the farm granary should be well ventilated. The grain should not be stored in bins to a depth of over three or four feet at first, or until well cured. Brewmaster Knorr of Pittsburg says:

Barley which is stored from six weeks to two months in the barn and has sweat requires, after threshing, besides thorough cleaning, nothing but a single good airing, i. e., shoveling over, provided that it came dry from the field. If the barley was taken to the barn while not quite dry, it should remain longer in the straw and should be trampled, so that the beards will loosen. The cleaning should be done by a good windmill, which takes out all foreign seeds, and then the grain should be stored upon an airy floor and laid not over five inches deep. According to the weather and the moisture in the grain the latter should be frequently aerated by shoveling, so that heating is impossible after it gets to the elevator. If barley

in the elevator is to be treated with the greatest care, it should be kept in motion with frequent elevating. In this way the grain is protected from the dangerous weevil and the worst enemy of malting, viz., heating. A device can be installed in the elevator for sulphuring the barley, if this be necessary.

Apparently Mr. Knorr is not of those who fly into "conniption fits" because the grain may be "purified" and made "detrimental to health," etc. Wm. Wecker of Battle Creek, Mich., is of the same mind, for he says: "Before the barley is stored in bins it should be freed from all injurious substances by sulphur vapor."

Wm. H. Prinz, of the Saladin Pneumatic Malting Construction Co., Chicago, relative to the handling of barley in the country elevator, says:

A country elevator should have sufficient bins so that the different grades of barley can be kept separate; and when shipping to the market, keep them separated by putting in a bulkhead in the car. Where other grain besides barley is handled, be careful not to mix the same with the barley, otherwise the result will be a reduction in price.

If barley has not been treated right by the

four bushels, and the yield from the miller's seed was eight loads and thirty-two bushels. The farmer was willing to pay the big price to get his eyes opened, but he didn't want anybody to know how foolish he had been about selecting seed.

SPROUT, WALDRON & CO.

From the standpoint of the trade, one of the most interesting exhibits at the World's Fair, St. Louis, is that of Sprout, Waldron & Co., the well-known mill builders and furnisiers of Muncy, Pa.

This display is at Block 108, Agricultural Building, and includes the Monarch Dust Collector, Monarch Whitmore Purifier, Monarch Double Roller Mill, Monarch 24-inch Heavy Duty Roll Feed Attrition Mill, Monarch 20-inch Standard Attrition Mill, Monarch 20-inch Standard Vertical French Burr Mill, Monarch Horizontal Corn Ear Crusher and No. 1 Monarch Corn Ear Crusher and Elevator.

The company's representative in charge, Mr. A. T. Sheward, will be pleased to welcome visiting millers at all times. Not only will he endeavor to

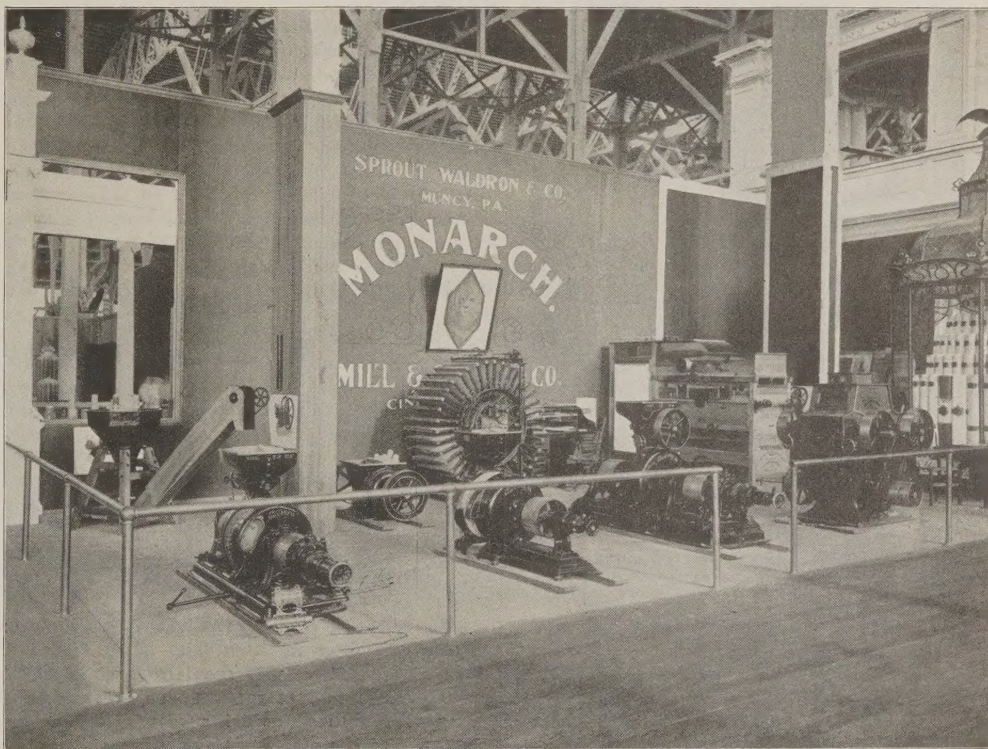


EXHIBIT OF SPROUT, WALDRON & CO. AT THE WORLD'S FAIR, ST. LOUIS.

farmer, and should heat in country elevator, elevate the same over and cool it off.

When sending samples to the market be sure to have an average sample of the lot; you will thereby avoid trouble, and the dealer who handles your barley will get you a better price, as he can assure the purchaser that your barley is always up to sample, as you are careful in selecting it.

The main points about handling barley in this stage are that it be not allowed to get heated, be not mixed with other grain, is cleaned as well as possible, and the surplus moisture expelled.

Illustrating the carelessness of some farmers in seed selection, the Bloomington Pantagraph has been told a true story of a northern Illinois farmer who had been planting a certain variety of oats for many years. He brought some of the seed to the miller to be cleaned, and the miller saw the oats were so poor that he offered to exchange good clean seed oats with the man at 10 cents difference per bushel. The farmer would not hear to it, and was satisfied the oats his father had grown were good enough for him, but finally he agreed to plant ten acres of his own seed and an equal area of the seed furnished him by the miller, the latter to take his pay in part or all of the excess of yield, if any, from the better seed. The ten acres from the farmer's old seed oats yielded four loads and twenty-

make them feel at home, but will also take pleasure in showing them the Monarch line and giving them any information that they may desire.

MICHIGAN GRADING RULES.

The Michigan Millers' State Association has adopted the following rules for the grading of wheat bought by them at their mills or exchanged:

Full-price red wheat must weigh 59 pounds to the bushel.

Full-price white wheat must weigh 58 pounds by the tester after being cleaned.

If wheat tests one pound light, we deduct 2 cents in price or one pound of flour in exchange. If wheat tests two pounds light, we deduct 4 cents in price or two pounds of flour in exchange. If wheat tests three pounds light, we deduct 7 cents in price or three pounds of flour in exchange. If wheat tests four pounds light, we deduct 12 cents in price or five pounds of flour in exchange. If wheat tests five pounds light we pay three-fourths of the full price.

All wheat testing lower than the foregoing is worth about the price of corn for feeding purposes.

If wheat is mixed with rye to the extent of 1 to 3 per cent, we deduct 5 cents per bushel in addition to all other deductions. Wheat mixed with more than 3 per cent of rye will be bought only on special prices.

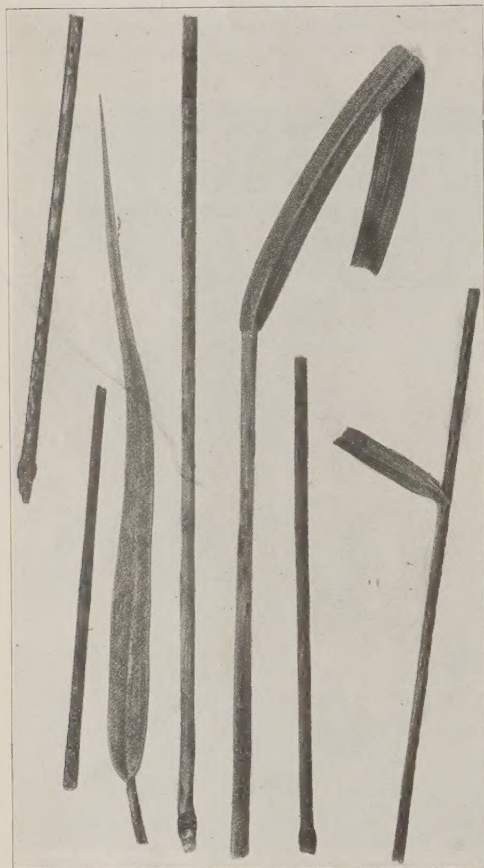
BLACK RUST OF WHEAT.

It is still impossible for one to estimate the damage to the spring wheat crop of the Northwest from black rust. Reports indicate that the rust appeared in various sections of the three north-western states, but until final returns are in little more than an approximate idea of the loss can be had.

While cereal rusts are more or less common in all grain-growing countries, causing an annual average loss of large proportions, comparatively little is known regarding their relations to each other and to their host plants.

The black stem rust of wheat (*Puccinia graminis*) is by far the most destructive rust affecting wheat in this country. In instances where wheat is a total loss the black stem rust is found to be the chief, if not the only, rust present.

It is now generally believed that the spores, or



APPEARANCE OF WHEAT AFFECTED BY BLACK RUST.

seeds, of black rust are always present in our wheat fields, awaiting favorable climatic conditions for development. The rust plant is a parasite and like smut of wheat grows in the inside of the straws. When the proper stage of development is reached the epidermis of the straw is ruptured and the spore masses make their appearance on the outside. This occurs in from ten to thirteen days after infection. When the weather is damp and humid just at the proper period of growth of the crop and of the rust, the infection is sure to be general.

The accompanying illustration gives an idea of the appearance of wheat affected with black rust.

The cob-pipe industry per se is about twenty-five years old and a species of corn has been developed for the purpose to give a cob of large size with dense, tough fibre. Some of the ears are three and a half inches long. The per cent of corn to cob is low, running between 60 and 70 per cent, whereas improved field corn, grown exclusively for grain, runs as high as 91 per cent of corn. This cob-pipe corn, however, is quite productive, yielding from 60 to 90 bushels of shelled corn per acre, while the cobs are worth, delivered

at the pipe factory, from \$10 to \$15 per acre. A number of the best farmers have their cobs contracted for a year ahead at \$15 per acre. This corn is not grown over a wide area, as it requires a very fertile soil. Perhaps 95 per cent of it is grown within a radius of ten miles of Washington, Franklin County, Mo. At Washington four extensive cob pipe factories are located, turning out annually from 50,000,000 to 75,000,000 pipes, which are sold in every civilized country of the globe.

ELEVATORS FOR RICE.

The management of the Nederland Rice Milling Company of Beaumont, Texas, on August 15 closed a contract with a local builder for the erection of an elevator for the bulk storage of rice; capacity, 60,000 bushels. The cost was \$20,000 and time allowed for construction 20 days. In this house the company means to handle rice in the same manner as grain is handled in bulk, the rice as delivered to the mill from the carts into which it will be thrashed being stored in bins and not sacked, saving much of the handling cost and the expense of bags.

This method of handling rice is strictly an innovation on the methods of handling rice the world over, and by the great majority of rice millers is disapproved. Gustav A. Jahn, for example, a noted "rice man" of Texas, says that owing to climatic conditions in Texas he is afraid the grain, if stored in bins or cribs, will heat and spoil. Otherwise the idea of a rice mill elevator is very desirable and in use would effect a large saving in the cost of handling the crop while in the hands of the farmer and miller. The rice mill, though much talked of as a new thing and created by the industry since its development in Louisiana and Texas, has long been in service in some sections of the rice area of Georgia and the Carolinas, the old mills still remaining; but because of climatic conditions, which are largely similar to those obtaining in Texas, the rice elevators have never given much satisfaction in those older sections of the rice area.

Mr. Jahn thinks that the idea of the rice elevator, if some method can be devised for overcoming the objections mentioned, would become general in all the rice mills, and would be of great benefit to the rice industry.

Experts in the grain elevators do not anticipate serious difficulties in doing this. E. R. Ulrich & Sons of Springfield, who are interested in 11,200 acres of rice in Matagorda County, Texas, in a letter to the Rice Journal a month before the above-named contract was given out, predicted that rice would in the near future be handled in bulk instead of in bags, "thereby saving considerable expense and probably preventing a large destruction of rice and bags by rats and mice. Our idea," they add, "is it should be thrashed into wagonbeds and dumped into regular dump elevators, and either spouted into the car in bulk or, if preferred, be sacked in the elevator for shipping."

While handling rice in bulk is an innovation, it must be remembered that elevators are not so old as the grain trade; and it is not improbable the exigencies of the rice trade will force the elevator into use as an imperative economy of the industry which sooner or later, if it has not already reached that stage, will arrive at a condition wherein the utmost economy in handling charges will be a feature of its existence, and especially of encouraging profit to the grower.

The industry, although it has grown wonderfully in the past decade, is still so young as to have few statistics. The government, has, however, undertaken to supply them hereafter, and on August 16 issued a preliminary report from the office of the chief of the Bureau of Statistics of the Department of Agriculture, which shows the total acreage of rice in the United States this season to be about 643,400 acres, distributed as follows: North Carolina, 1,800; South Carolina, 33,300; Georgia, 9,000; Louisiana, 365,100, and Texas, 346,300 acres. The acreage of the country has

increased 83 per cent within the last five years, and is now four times as large as it was fifteen years ago. In 1899 Louisiana and Texas contained about 60 per cent of the total acreage of the country; now these states contain 93 per cent of the greatly increased total.

The crop for this year has already begun to move, the first cars at Crowley and Jennings, La., having been received on August 23, ten days ahead of last year. Thrashing began in a tentative way during the last week of August, but will not be general until cool weather comes. No official statistics of the yield are available, the Agricultural Department not making any estimate until December. In the meantime, however, Messrs. Jahn and Geo. East, experts both, are guessing. Mr. Jahn says that on the acreage estimate of the government (643,400), at an average of eight sacks per acre, the yield should be 5,147,200 sacks. Mr. East says that the crop of Louisiana this year is fully 30 to 35 per cent short, and in Texas 15 to 20 per cent short of last year, when according to Rice Industry, the Texas-Louisiana yield was 5,055,000 sacks and of the Carolinas 400,000 sacks. Present conditions in New Orleans point to good prices for the entire crop.

In order to move out of Louisiana the old rice on hand as the new grain became ready to harvest, the S. P. Ry. made an emergency rate on rough rice, open for about 20 days in August, as well as reduced the rate on cleaned rice to Atlantic Coast points via New Orleans. The result was to stock New Orleans and Eastern points with old crop rice, which is never worth as much as the new crop, but must still have a bearish effect on prices of new crop. It is the purpose of the interests of New Orleans to ask that these reductions be made permanent, and that a corresponding reduction be made on rough rice from all points on the lines of the Southern Pacific in Louisiana and Texas. These reductions are now under advisement.

The New Orleans Picayune, however, throws a great deal of light on rice mill methods in this connection, which is most interesting. The paper says:

"An unusual feature in such cases has developed in a well-defined opposition to the proposed reduction. This opposition has been brought about by certain country interests who are satisfied with a reduction on clean and in turn are asking that the rates on rough rice be increased. Others are indifferent, but a large number will give their support. It is easy to understand that this opposition has developed from those parties interested in toll mills, who have nothing to gain by a reduction in freight rates, but much to lose in rice they could not control in the event of a reduction. At present the mill is the principal warehouse for rice in western Louisiana and Texas, and frequently the only place where the farmer can store his rice. By storing in the mill the mill gets control of this rice, as the farmer must first pay the mill heavy charges before it can be removed. Rather than pay these charges the farmer is compelled to let his rice remain, as these charges are not made if given to the mill on toll.

"The rice crop is harvested from August to December, at times sooner, and to move a crop of 5,000,000 sacks in that time requires a great deal of money. The mill, being on the spot, is the first one called upon to make advances, and as advances are needed by nearly every farmer, it can readily be seen that the bank account of a mill must be of pretty large dimensions. The farmer is charged 8 per cent on these advances, which are not made before his rice is pledged to the mill to be milled on toll. He must then pay the toll when his rice is milled, which, with charges for selling, pockets, etc., brings the total to nearly 60 cents per barrel. It will thus be seen that if every sack of rough rice was milled on toll, it would have to pay the mill that amount before it could get to market. This would amount to more than \$3,000,000 on a crop of 5,000,000 sacks, as a sack of rough rice contains about 20 per cent more than 162 pounds. It can be readily seen what the profits would be to a mill handling 100,000 sacks of rough rice, and whose capital is not more than \$75,000. Therefore, it is natural that these mills would be the first to oppose a reduction in freight rates, which would mean the loss of considerable rice to them.

"If we consider the cost of transporting a barrel of rough rice from the initial point of shipment, another \$1,500,000 can be added. It is impossible for the rice industry to prosper under these conditions, and unless the railroads and toll mills give

their assistance by reducing these figures, they will find themselves doing less business than half its present size."

Meantime, in preparation for handling the new crop, the "Rice Committee" of the New Orleans Board of Trade has adopted the following amendments to its rules governing sales of rice at that institution:

"Rule No. 4.—In the absence of any special agreement, all sales for rough and clean rice shall be on the basis of ten days, net cash, gross weight.

"Rule No. 5, Section 1.—All rough rice sold in this market shall be weighed by a public weigher before removal. The buyer shall have the privilege of reweighing, at his expense, any lot of rice purchased, before removal of the rice; and in case of controversy, the reweighing shall be done by a weigher holding a certificate of appointment by the board of directors, whose certificate of weights shall be final and binding upon the members of the Board or others interested, or requiring or assenting to the employment of said weigher. Party at fault to pay for the reweighing.

"Rule No. 5, Sec. 2.—In case of controversy arising from difference in weights of clean rice, the parties thereto shall cause the rice in question to be reweighed by the New Orleans Board of Trade, Limited, weighers, and their certificate shall be final and binding, except on pockets, bags, or barrels, from which samples have been drawn by the purchaser. Rice to be weighed at the mills.

ACCIDENT AT NEW ORLEANS.

On August 17 about 400 feet of the grain conveyor extending from the Westwego Elevator of the T. & P. Ry. Co., at Westwego, La. (opposite New Orleans), toppled over as a result of the action of the Mississippi. The loss was about \$10,000. The collapse of the wharf was caused by the heavy deposit of sand left by the river when it fell so rapidly during the last few days before the accident. The recent heavy rains had overflowed the land behind the wharf and drained into the river through this heavy deposit of mud. The water loosened the mud and caused it to slough. Great quantities of the mud in compact masses forced themselves riverward and pressed against the piles supporting the grain-conveyor wharf. These piles were forced out of alignment, and the wharf was weakened. It first began to show its weakness on the morning previous to its fall, when it was discovered that the piles had been thrown out of plumb and that the wharf was sinking onto the batture. Then the section of the grain conveyor, about 500 feet in length, which is just between the two elevators, began to show signs of weakening and gave evidence of an early collapse.

result. This time the conditions were reversed, for the river had just fallen several feet and was at about normal height when the conveyor fell.

STEALING QUOTATIONS NOT A CRIME.

Magistrate Ommen of New York City has ruled that stealing stock and grain quotations, where no wires are tapped, is not a crime, and on this reasoning refused to hold a man arrested in the act of taking quotations from a bulletin board in a private office and transmitting them by telegraph to bucket-shops in Albany and Boston.

John Hill Jr., "leak commissioner," so to say, of the Chicago Board of Trade, traced a serious leak to the branch office at 1269 Broadway of Morris & Wilmarth, members of the Chicago Board. How Mr. Hill traced the leak he has not made public, but he has said that Morris & Wilmarth knew nothing of the leakage. The branch office was in charge of one J. R. Lewin, who leased the rooms in his own name. Lewin, as Mr. Hill explained to a Sun reporter, "sublet one of the rooms to a man who described himself as C. B. Addison, but whose real name is Baldwin. In the office used by Lewin



ELEVATORS AND GRAIN CONVEYOR SYSTEM OF THE T. & P. RY. CO. AT WESTWEGO, PA., BEFORE THE ACCIDENT.

"Rule No. 5, Sec. 3.—Where clean rice is reweighed within ten days of purchase, and hauled away from mill or warehouse within that time, should the loss be greater than $\frac{1}{4}$ of 1 per cent, the weighing shall be paid by seller of the goods, in addition to paying for the shortage in weight. Should the rice hold out to within $\frac{1}{4}$ of 1 per cent then the party ordering the reweighing shall pay for same.

"Rule No. 5, Sec. 4.—All consigned clean or rough rice sold on the landing or at railroad depots, or other public warehouse in this city, shall be weighed by a public weigher, at the seller's expense.

"Rule No. 5, Sec. 5.—All clean rice accepted within the stipulated time may be stored by the mill at purchaser's risk, free of charge, for thirty days, and a further extension of storage may be granted at the option of the mill for thirty days additional, but under no circumstances shall any rice be stored by any mill after sixty days from date of purchase. If not hauled within the given time, goods will be stored at purchaser's expense.

"Rule No. 5, Sec. 6.—No claim for short weight shall be allowed unless the rice is weighed at the mill at the time of removal, and the mill has been given the opportunity of reweighing any lot or lots claimed to be short weight. And under no circumstances shall any claim for short weights and damages be allowed after thirty days from date of purchase, or after delivery.

"Rule No. 5, Sec. 7.—Any duly qualified public weigher, who is a member of the New Orleans Board of Trade, Limited, shall be eligible to weigh clean or rough rice under this rule."

The Agricultural Department is about to send a representative to Wayne County, Ind., to begin a series of experiments in wheat growing on 20 acres of land leased of W. S. Ratliff.

Tugs were put to work in an endeavor to save as much of the wharf and conveyor as possible. The heavy iron shaft which runs through the entire length of the 1,000-foot conveyor was cut at both ends of the endangered section, and the machinery and belting in that section of the conveyor, which are of considerable value, were removed. Heavy steel cables were run out from the conveyor to supports on the wharf to prevent its collapse into the river.

In the matter of sliding wharves, the Texas & Pacific Company has been very unfortunate, says a local paper. One year ago last spring about 250 or 300 feet of its Westwego wharf slid into the river, and this damage had just about been repaired.

The entire wharf at Westwego was about 2,000 feet in length. The grain conveyors which it supported and which were connected with the two large elevators were about 1,000 or 1,200 feet in length. The greater part of the wharf and Elevator B were constructed about two years ago. The improvements cost the railroad company about \$300,000. Before the erecting of Elevator B, Elevator A did all the work of the Gould System. The great increase in the grain exports, however, resulted in the building of more wharves and the new elevator.

When the 250 or 300 feet of wharf at Westwego slipped into the river a year ago last spring, the river was at high-water mark, and above the danger line. On that occasion the continued lapping of the water and the suction drew away from the piling its support, and the wharf gave way as a

the blackboard faced the door leading to Baldwin's room adjoining. The top of the door was shaved off for the fraction of an inch and part of the moulding or cleat was removed. In Baldwin's room against the door was a table with a chair on it. Sitting in the chair, a man could see the blackboard and also hear the quotations called off. On the wall and beside the chair was a bracket holding a telegraph instrument. A leased Postal telegraph wire ran to Boston. In a roltop desk was a telephone on a leased wire to Albany, and in addition there was a telegraph wire to the same city."

Having made this discovery, Mr. Hill, with the cooperation of Mr. Morris, raided the branch office. Having obtained from the janitor a duplicate key of the sublet room, they entered the room and found a man sitting on the chair on the top of the table. He had his hand on the telegraph key beside him. He was arrested, and Mr. Morris went into his branch office and told his manager, Lewin, to close it up, and it was closed for good.

At Jefferson Market, next day, the prisoner said his name was Michael H. Waters. Magistrate Ommen, after hearing the story, discharged him for reasons above given.

The Frisco-Rock Island system will be a competitor this season for Illinois corn exported via New Orleans. The grain will be routed to New Orleans over the Chicago & Eastern Illinois, Frisco, Southern, Mobile & Ohio and Northeastern by way of Tupelo, Miss. The part going to Mobile will be handled over the Mobile & Ohio.

A MALT HOUSE ELEVATOR.

The new tile elevator of the Joseph Schlitz Brewing Company of Milwaukee completes the building of what The Western Brewer says "is without question one of the largest, finest and most complete malting establishments in existence." The elevator has a storage capacity of 650,000 bushels. The plans were made by Louis Lehle, the company's own architect, and the construction contract was executed by the Barnett & Record Company of Minneapolis.

The elevator consists of a working house, 28 feet square, five stories or 130 feet high, located on the corner of the tract, and a series of twenty-eight tile tanks. The working house is a steel structure, incased in brick walls. Grain is received from cars and unloaded by power shovel into a receiving hopper, from which it is spouted to a short lifting elevator, and discharged into two 2,000-bushel scale hoppers furnished by the Fairbanks-Morse Company, Chicago, where the grain is weighed and recorded by the printing-beam attach-

of 2-inch hollow glazed tile. This course is added for extra fire protection where tanks are exposed, also for weather protection and general appearance. The regular wall tile are all laid up with cement mortar, and in each alternate course are placed steel bands encircling the tanks to take care of all lateral strains. These bands are incased in Portland cement mortar. The foundations to tanks are composed of circular and parallel concrete walls. The parallel walls inclose four basement belt conveyors, which are placed under the several bins and spaced so that all the grain from the 45 compartments may be spouted direct to the belts. Surmounting the bins is a one-story cupola, constructed with a steel frame, encased in hollow tile walls, roof and floor. In this story are two conveyor belts, which receive the grain from the working house and discharge it into any of several bins or compartments. The entire building is, of course, fireproof.

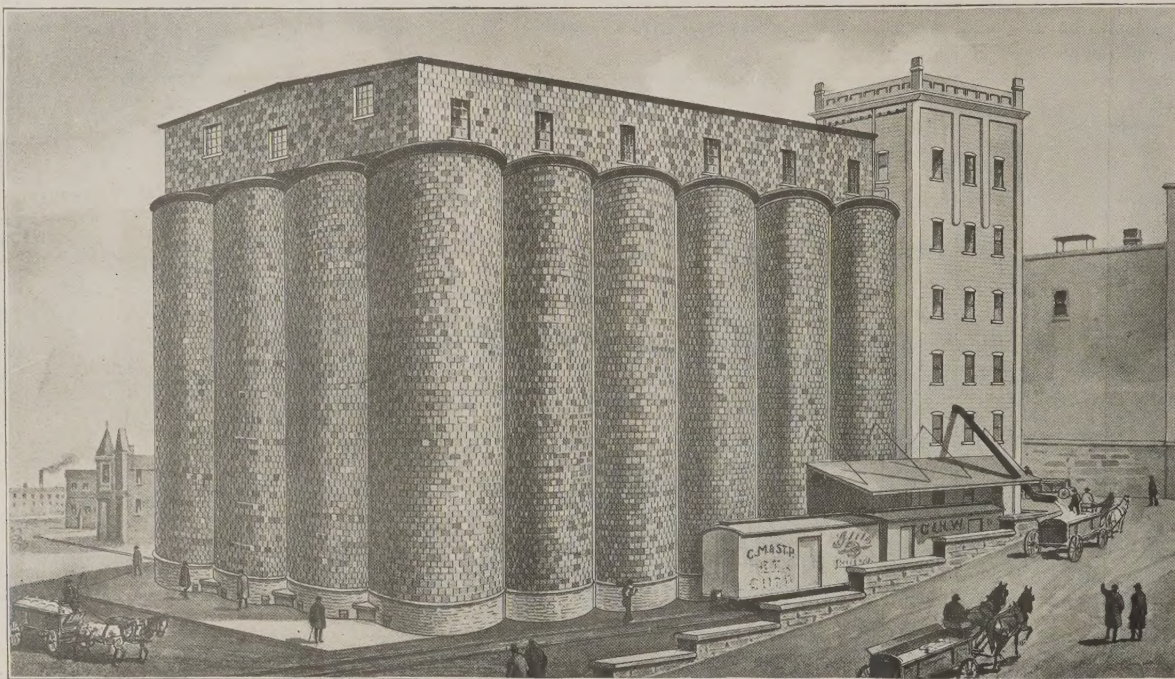
The power for the machinery of the elevator is furnished by separate individual motors, operated from the central power station of the brewery.

and export traffic in grain, and that beginning this fall the Frisco will go after the corn tonnage moving south, the freight to be routed over the C. & E. I., Frisco, Southern, M. & O. and N. O. & N. E., via Tupelo, Miss., or via M. & O., when going to Mobile.

And now come rumors that the Burlington wants to "get next" to this same Southern tonnage, and a Kansas City telegram says the "Burlington's" holdings in allied lines will be extended so that the business that will go through Kansas City by the Burlington from Kansas City to the Gulf, when the new grain-carrying line is built, may be handled easily and promptly. When this line is completed, wheat crops of the Northwest are to be diverted from St. Paul and Minneapolis and from the Eastern seaboard to the Gulf by way of Kansas City.

As to this, however, the Wall Street Journal says:

"Reports that a company owning a chain of elevators on the Burlington System, which has heretofore shipped its grain through Newport News,



MALT HOUSE ELEVATOR AT MILWAUKEE OF THE JOS. SCHLITZ BREWING CO.

ment. From the scale hoppers the grain is spouted into the long lifting elevator, which carries it to the top of the working house or to conveyor belts, and discharged into the several tile bins or conveyed to the old elevator located across the alley, a bridge running from the old house to the fifth floor of the new working house. The working house is also equipped with two other sets of elevator legs, one designed to receive the grain from the conveyor belts in the basement and to discharge it into any bin in the elevator, the other to take the grain from the cleaners and deliver it to the malt house adjoining, or back into the storage.

There are located in this house four Prinz & Rau Barley Separators, with Prinz & Rau Dust Collectors. These machines receive their grain from the uncleaned-barley bins and discharge the cleaned barley into the clean-barley bins. This arrangement makes it possible to run the cleaners a limited time without running the elevators to feed, and take care of the grain simultaneously.

The storage portion of the plant consists of 28 cylindrical tile tanks, the intermediate spaces also being used for storage. These bins are 18 feet 9 inches outside diameter and 90 feet deep. They are constructed after the patents known as the Johnson & Record system of cellular semi-porous tile grain bin construction. The inside walls consist of one course of tile 5 inches thick, while the outside, or exposed, walls have an additional course

Any part of the machinery may be started or stopped independently.

The grain-handling machinery was manufactured by the Stephens-Adamson Mfg. Co., Aurora, Ill.

GRAIN GOING SOUTH.

The men who, for a decade or two after the close of the Civil War, forgetting some of the things done by the South before that conflict, predicted that the Gulf ports could not export grain safely on account of climatic conditions, are either gone to their rest or otherwise silenced—concrete examples of the fallibility of uninspired prophecy. So far were they wrong, it would now be deemed a safe prediction that the Gulf ports will dominate the export trade in both grain and grain products of the Middle West, and perhaps portions of the Northwest, as well as of the Southwest, for the future.

New Orleans more especially is in evidence as the great ex-port for grain, and is looking to still greater things hereafter. The deal that put Illinois Central Elevator D there into the hands of the Harris-Scotten Co. for their export business is remembered. Following that affair, the traffic men of the Frisco System announced that the amalgamation of that system and the C. & E. I. lines puts the Frisco into the competition for New Orleans business in Illinois territory hitherto served exclusively by the I. C. road for Southern

contemplates building a large elevator at New Orleans and thereafter sending its consignments through the latter port, has, in many circles, been regarded as significant of some new traffic arrangement between Burlington and Illinois Central. This is not the case. The matter is of larger significance as showing the natural tendency of traffic to follow the line of least resistance, which is down the Mississippi Valley, rather than over the Alleghany Mountains to the Eastern seaboard.

"With the routing of traffic beyond its own lines Burlington has nothing to do. The shipper selects his own route, and Burlington makes absolutely no discrimination. This is true of all the 'Hill' lines which make through rates over any line the shipper may select.

"The general belief that Mr. Hill has long been anxious to secure a Gulf connection appears to have given to this move on the part of an elevator company a degree of importance to which it was hardly entitled. Some day there may be a 'Hill' route to New Orleans, or some other Southern port, but it is not in sight at present."

Peoria receivers are still after the local grain car plunderers, making a particular effort to sentence the receivers of the stolen grain.

Winnipeg received her first car of 1904 wheat on August 25 from Malita to Lake of the Woods Milling Co. It graded No. 1 hard with 1½ per cent dockage.

CROP YEAR AT MINNEAPOLIS.

Receipts of wheat, crop of 1903, at Minneapolis were nearly 4,000,000 bushels less than for crop of 1902, although the total of all grain handled for the season ended August 31 last was nearly 5,000,000 bushels greater than for any season previous. While wheat, flax and rye receipts declined those for corn, oats and barley show handsome increases. The totals, as compiled by Secretary Rogers on September 1, are as follows:

	1904. Bushels.	1903. Bushels.
Wheat	85,059,580	88,900,250
Corn	3,912,090	2,833,420
Oats	24,757,710	18,468,840
Barley	12,171,320	9,476,800
Rye	1,785,430	1,385,150
Flax	8,216,970	10,020,170

Totals.....135,903,100 131,084,630

The shipments of flour were 14,536,896 barrels, which is less than the high water mark.

COURT OBJECTS TO CORNERS.

The Chicago oats corner of July, 1902, has arrived at another step in the way toward a final settlement, Judge Chytraus having on September 3 decided that the "corner" was a "corner," and that, therefore, the complaining traders, about 40, represented in the action at bar by Waite, Thorburn & Co., shall be allowed to settle at 42½c for standard and 33c for No. 2 oats, and not at 64c for standard and 47½c for No. 2 oats, as demanded by the longs. The margins in controversy, about \$400,000, have been in bank during the two years last past, while the case went through this court, then the Appellate Court and now Judge Chytraus' court a second time to establish a price.

The gist of the decision, which was very long, is that on July 31, 1902,

there were on the Chicago Board of Trade two markets, viz., in the "pit" and at the "sample tables," the conditions and circumstances under which each existed being entirely different; that for one and the same kind and quality of oats there were different prices in the two markets; that in "pit" transactions the "settling" or average market price on July 31 was for "standard" oats 64 cents a bushel and for "No. 2 oats" or "old style," 47½ cents a bushel; that at the "sample tables" there was no such term as a "settling" price, but there the "average" market price for "standard" oats was 42½ cents a bushel and for "No. 2 oats" 33 cents a bushel July 31, 1902; that the prices in the "pit" were artificial prices, brought about by the artifice of man by means of a system of customs, rules, regulations and restrictions upon the natural supply of and demand for the commodity in question, the effect of which was to create on July 31, the last day for "delivery" of oats, a "stalled" condition of the market.

Speaking of the restriction to "regular" elevators of grain for pit trading, the judge quotes testimony of George E. Marcy of Armour & Co. that "grain of the same quality not graded and stored in a 'regular' elevator, although actually present in Chicago, might, as far as delivery on a pit deal is concerned, as well be in Liverpool."

The judge finds from the testimony there are only twenty-two "regular" elevators in Chicago out of seventy-four. They are operated by twelve firms, and the same firms operate fifteen of the other fifty-two elevators. In view of the large grain capacity of the "irregular" elevators in comparison with those favored for pit purposes, the judge says a restricting circumstance is brought about as affecting the market at the time of the corner.

The case at bar was brought up by Waite, Thorburn & Co., who sold 300,000 bushels oats short, part of them around 37½c. The Bartlett-Frazier-Patten interest, who ran the deal, had at one time close to 5,000,000 bushels oats bought. The price at one time was run up to 71c but was let down at the last to 64c for standard. Excessively wet weather throughout the month of July delayed the harvest and prevented oats shipped in here from grading. The price in the pit was held up so high that they caused the trade more trouble and litigation than any deal that has ever been run. A

special arbitration committee fixed the price at 57½c, and everyone settled on the Board except the complainants, who enjoined all parties having trades with them from forcing a settlement. Numerous injunctions were secured to restrain settlement, except those issued in favor of Waite-Thorburn, who, according to the rules of the court, will be able to settle at 14½c under the closing price of No. 2, and 21½c lower on the standard than the closing figure July 31, 1902.

BARNARD'S PERFECTED AIR CIRCUIT SEPARATOR.

The grain trade will be interested in the new Barnard Perfected Air Circuit Separator, shown in the accompanying illustration and just placed on the market. In this machine the Barnard & Leas Manufacturing Company of Moline, Ill., have embodied all the latest and most improved ideas for the cleaning of grain besides all the valuable features which have made their machines popular with the grain public.

While the machine is termed an air-circuit separator it is not desired to give the impression that

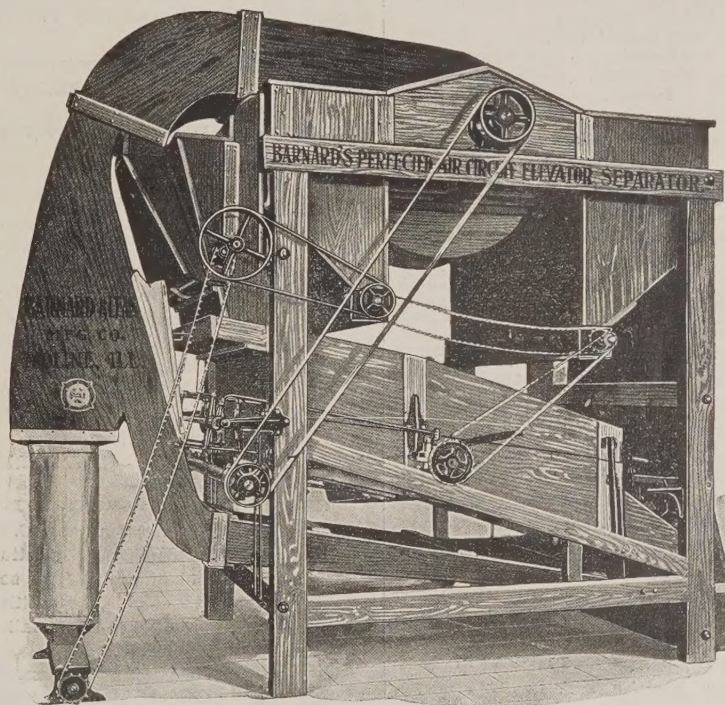
an opportunity to pass through. This feature also gives the machine larger capacity with finer perforations than could otherwise be obtained. As the brushes are only eight inches apart under the entire length of the sieve they consequently prevent the perforated metal from sagging and insure a perfectly level sieve during its entire lifetime.

The construction of the sieve and feeder is such that a perfectly even spread of the grain can be had with certainty at all times the entire length and breadth of the sieve. The bearings and all wearing parts are outside of the shoe and consequently are not affected by the grit and dirt that is in the grain, while they are easy of access for adjustment, oiling, etc. All sieves are adjustable.

When constructed for use as a receiver the machine has only one grain sieve and a seed screen. Otherwise it is the same as the elevator separator.

A KANSAS CITY SHOP.

A get-rich-quick concern in Kansas City, operated by one Chas. C., alias "Colgate," Fales, under the firm name of Arthur E. Whitlock & Co., was in-



BARNARD'S PERFECTED AIR CIRCUIT SEPARATOR.

it is a strictly air circuit machine, as it has been found the best results are not obtainable from a separator of that character. On the contrary, an ample outlet is provided for the surplus air even to the extent of causing the fan to draw air in through all discharges and other points where dust is liable to escape from the machine. This makes it practically dustless and at the same time the air is so controlled that the dust, screenings and grain are deposited separately and can be easily taken care of. The air separations are very powerful, as the air going to the fan is assisted by the air coming from it. At the same time the machine requires about half the power to operate it as the ordinary machine blowing to a dust collector.

Especially attention is called to the sieve cleaning device, which is said to be something new and superior to anything heretofore designed for the purpose. Every inch of the sieve is thoroughly cleaned every minute by brushes beneath it. They lift the trash out of the holes and cause it to fall over instead of assisting it to pass through with the grain. The perfect cleaning of the sieve enables the operator to carry the load well down toward the discharge end of the sieve, and as the trash will always rise or float to the top of a body of grain that is being agitated, it will be carried down to the tail of the sieve before it has

interrupted on August 20 by the United States Marshal, the proprietor being arrested on a charge of fraudulent use of the mails.

Fales purported in his circular literature to act as the agent of those who desired to speculate, sending out advertising circulars to that effect. The papers in his office seized by the Marshal included a number of accounts and records that undoubtedly belonged to the Rialto Grain Company of St. Louis, with which United States Senator James R. Burton of Kansas was at one time connected. These records are in the form of cards, which indicate that the average amount paid in by the would-be speculators is not far from \$100. The cards number 3,000, and bear the names of many Canadians, while there are many of persons in South Carolina, Georgia, California, Massachusetts and other states. Several of the cards also show that the company had invested sums for persons in the government departments at Washington, and even the New York state penitentiary is represented.

Fales is said to have once conducted the Consolidated Stock Exchange at Philadelphia and to have lived in New York City at another time.

Extensive experiments with Kaffir corn have been planned for the southeastern part of Colorado by the state agricultural college authorities.

HARVEST IN ILLINOIS.

On the plains the corn is growing,
Illinois, Illinois,
And it makes a bumper showing,
Illinois, Illinois.
Soon the fields with wealth untold,
Yielding boundless hoards of gold,
Like a vision will unfold,
Illinois.

Orchards flecked with red and yellow,
Illinois, Illinois,
Drop their burdens rich and mellow,
Illinois, Illinois;
Russet grow the rolling plains,
Where the heaped-up laden wains
Overflow with new-thrashed grains,
Illinois.

Hark and hear the wood birds calling,
Illinois, Illinois,
Where the butternuts are falling,
Illinois, Illinois;
Forest paths are paved with gold,
While the summer waxes old,
Dead leaves kiss the fertile mold,
Illinois.

Sunshine gleaming warm and tender,
Illinois, Illinois,
Floods the hills and dales with splendor,
Illinois, Illinois;
Plenty wends her jocund way,
Singing loud a roundelay,
In among the ricks of hay,
Illinois. —Chronicle.

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

WILL HELP IN THE WORK.

Editor American Elevator and Grain Trade:—
We think this matter of reciprocal demurrage should be taken up all over the country and that it should be done by legislation along about the same line it is done in Texas, and any assistance that we can render in that direction will be cheerfully performed. We remain,

Yours truly,
Kansas City, Mo. BEALL GRAIN CO.
Per B. R. Beall.

RULE SHOULD ACT BOTH WAYS.

Editor American Elevator and Grain Trade:—
We think it is a poor rule that does not work both ways. If a railroad company charges for the detention of cars beyond the stated term, it should also pay for the neglect to furnish cars beyond the stated term.

We think the reform would be best brought about by an agreement with the railroads and not by state legislation.

Yours truly,
Lawrence, Kan. F. BARTELDES & CO.,
Kansas Seed House.

RAILROADS NEGLECT THEIR OPPORTUNITIES.

Editor American Elevator and Grain Trade:—
The question of reciprocal demurrage is certainly a matter that should have the attention of all grain dealers. In our opinion, railroads seem to neglect the opportunities that they should take advantage of in the matter of handling grain. It certainly behooves them to give the grain men all advantages possible in handling farm products. We find quite often it is possible to unload a car two or three hours after its arrival, for which the shipper is given no credit; but if we use three or four hours over the ordinary demurrage period it costs a dollar. If the railroad companies fail to place a car when wanted, it invariably entails loss upon owner, for which he gets no compensation.

We believe the matter can be best brought about by an agreement with the railroad companies. We are not in favor of legislation covering this mat-

ter, as we have always found that railroads are willing to make changes when the right amount of pressure is brought in the right kind of a way.

Yours truly,
Cincinnati, O. THE GALE BROS. CO.

FRIENDLY AGREEMENT BEST.

Editor American Elevator and Grain Trade:—
We believe in reciprocal demurrage rules, but we deem it would be best brought about by friendly agreement between the railroads rather than by legislation.

Yours very truly,
Milwaukee, Wis. L. BARTLETT & SON CO.
Per B. G. Ellsworth.

RAILROAD COMMISSIONERS SHOULD ACT.

Editor American Elevator and Grain Trade:—
We think it is a poor rule that does not work both ways, and that the railroad companies should pay demurrage on failing to deliver the cars when ordered after a certain length of time, although it might be longer than the rule they have in regard to demurrage.

We think the proper place to take this up is with the railroad commissioners. In Iowa we have a good set of these and they have always done good work.

With best respects, we remain, yours truly,
Clarinda, Ia. A. A. BERRY SEED CO.

RECIPROCAL DEMURRAGE MIGHT BE UNFAIR.

Editor American Elevator and Grain Trade:—
We feel that in numerous cases demurrage is wrongly charged, and that the railroads should be more lenient in certain cases; but we could hardly favor reciprocal demurrage, owing to the fact that during years when the wheat crop is enormous it would be utterly impossible for the railroads to furnish cars on demand from their numerous shippers, and the hardships brought upon them would be great. We would favor a reduction of demurrage charged by the railroads.

Yours very truly,
Duluth, Minn. G. S. BARNES & CO.

CAR SERVICE CHARGES ONE-SIDED.

Editor American Elevator and Grain Trade:—
We think that the demurrage question is beyond a doubt a one-sided affair, and we see no reason why the shipper should not be entitled to demurrage when the railroad companies fail to set, place or switch cars in a specified time.

The way to handle this business, we think, is through the different state commissions. The Texas railroad commission has worked wonders for the shippers in this state.

We are, yours truly,
BRACKETT-WALLACE MILL & GRAIN CO.
Per H. R. Wallace, Secy. and Treas.
Sherman, Texas.

THE CASE PLAINLY STATED.

Editor American Elevator and Grain Trade:—
On the question of reciprocal car service, the arithmetical proposition is certainly a very simple one. There are to all intents and purposes two branches of commerce. The one is formed of the owners of the commodity and the other branch is the carriers of the commodity. If the use of the car is worth \$1 a day to the carrier, the want of the car is worth something to the other fellow. Again, if the railroad charges \$1 a day for use of the car as an incentive to force speedy unloading, then the owner of the goods is entitled to an equal incentive to make the railroad trot a more lively gait in the furnishing of cars. In other words, the two branches are partners in business, and what is good for one is good for the other.

Unfortunately, the carrier is the big partner in the business, and being rather selfish, he is unwilling to give due consideration to the other partner's claims; so that the owner is forced to call in an arbitrator in the shape of state legislation. This is the only way by which the big fel-

low can be made to hearken to the demands of Mr. Shipper-Receiver.

Yours truly,
Richmond, Va. S. T. BEVERIDGE.

IF NOT BY AGREEMENT, THEN BY LEGISLATION.

Editor American Elevator and Grain Trade:—
The idea of reciprocal demurrage is a good one, and we think if it cannot be brought about by agreement of the railroads it should be taken up by the legislatures of the different states.

We think that the roads that charge demurrage for detention of cars beyond a certain time should be obliged to pay demurrage for neglect to furnish cars beyond a certain time. We believe that a proper adjustment of these two subjects would be equally to the benefit of shippers and carriers.

Yours truly,
Superior, Neb. BOSSEMeyer BROS.
By F. L. M.

OPPOSED TO UNIFORM BILL OF LADING.

Editor American Elevator and Grain Trade:—
We are, of course, opposed to the use of this bill of lading, and certainly would not make any shipments under its present form.

The words, "Not Negotiable," on the original bill of lading would destroy its use for collecting advances from the banks, as we are very certain they would not accept it; and if there is anything in the world that we can do to make our protest felt by the roads, we shall be very glad to take the matter up.

Yours truly,
Midland Elevator Co.,
Per J. E. Seaver, V-P. & G. M.
Kansas City, Mo.

CAR SERVICE CHARGES SHOULD BE RECIPROCAL.

Editor American Elevator and Grain Trade:—
For a number of years we have advocated reciprocal car service. While it is not just that shippers should use railway equipment for storage purposes, on the other hand it is equally unjust for railroads to compel grain men to pay storage and other charges until they furnish cars. It is our opinion that a ruling should be made by which railroads should be obliged to pay for their neglect or failure to furnish cars based upon their rules for same charges where equipment is held longer than free time. Some such agreement or legislation would be beneficial and facilitate business materially.

Yours sincerely,
St. Louis, Mo. G. L. GRAHAM & CO.

LEGISLATION WILL BE NEEDED.

Editor American Elevator and Grain Trade:—
The justice and fairness of reciprocal car service any fair-minded person must admit.

Thousands upon thousands of dollars are paid out every month by the shippers throughout this country to the railroad companies, in the way of car service, where the shipper is possibly only an hour or so slow in releasing the empty car; also where he is delayed in loading, and nine times out of ten the delay is traceable to the inability of the railroad company to deliver the goods promptly when they have finally been loaded at destination or to furnish cars to load when they are asked for.

There is no car service payable to the shipper or consignee when a shipment is held ten or thirty days overtime in transit, and he is put to a loss in a hundred different ways. But if the shipper for any reason holds the car a moment longer than the time allowed, car service is assessed and payment compelled.

It is a poor rule which does not work both ways. If railroads were obliged to pay car service for delays in transit and delays in furnishing shippers with cars when called for, the car service paid to shippers would be a considerable item over and above what the railroads now realize out of us.

Railroads will never agree to reciprocal car service, and it must only be forced on them by

state legislation. They are quite as well aware how the matter stands as we are; in fact, we believe, much better.

Very truly yours,

THE F. C. AYRES MER. CO.

Denver, Colo.

LAW NECESSARY TO PROTECT ALL SHIPPERS.

Editor American Elevator and Grain Trade:—It has always seemed to us that there should be some redress for shippers who are unable to move stuff on account of lack of cars. We think the railroads should pay a penalty or furnish cars after five days' notice. They should also give five days to unload, after which time a reasonable demurrage should be charged.

We think, also, there should be some limit to the time for getting grain to destination after loaded and billed.

We believe the state law would be more effective, otherwise some shippers would get better terms than others, as is now the case.

Yours truly,

Lincoln, Neb.

FOSTER GRAIN CO.

DEMURRAGE SHOULD BE PAID FOR DELAYS.

Editor American Elevator and Grain Trade:—We believe in reciprocal demurrage, but think it can be best brought about by agreement with railroad companies. We have very little faith in any legislation that may be enacted with a view to make railroad companies do something that they do not want to. They seem to have a way of getting around such legislation.

While believing in the reciprocal demurrage, we do not believe in any attempt to fix the penalty on the railroad companies when they are unable to furnish cars promptly. That looks too unreasonable; but after they have a car loaded with property and do not make delivery in due time, then they should pay demurrage just the same as the other party has to pay if he does not empty a car on time.

Yours truly,

St. Louis, Mo.

FUNSTON BROS. & CO.

THE DEMURRAGE CHARGE IS JUST.

Editor American Elevator and Grain Trade:—The writer has advocated the reciprocal car demurrage charge as long as three years, and considers it equally just. Neither the railroad companies nor shippers have any right to take the other's property and hold the same longer than is necessary to perform the service which they are called to do.

This should be attached to the interstate commerce law, and made universal, as it would be useless to make it a subject for each state to handle, owing to the fact that the delay might be beyond the state in which the freight is to be delivered. Demurrage charges follow the goods; so likewise reciprocal demurrage should be an offset against the freight, and actually deducted from the freight. We are

Yours truly,

Bay City, Mich.

BROMFIELD & COLVIN.

THE MILLER HAS THE FIRST CLAIM.

Editor American Elevator and Grain Trade:—We believe the miller has the first claim and demand on the wheat in his locality, and we have never tried to buy wheat unless we thought there was plenty for both, or until the miller had secured enough to assure him with a reasonable run. As a rule, the grain dealer cannot expect to ship out wheat and have the miller stand by and see it go away, and then have to ship back; so he bids up to a price that will secure the wheat.

It would be much better if they would come together and the miller pay the grain man a small commission until he got all the wheat he wanted. The lower price he would be able to buy at in this way would very easily overcome the commission he paid the grain dealer. As a rule millers will not do this, and as a rule also communities are down on the mills, as there is usually only one

mill in a town and the communities are always against anything which looks like a one-sided proposition. Farmers would be very much better satisfied if there were two people in a town buying wheat than if there were only one, although they might be paying 5 cents less to the single man.

Very truly yours,

G. E. ADY.

Denver, Colo.

RECIPROCAL DEMURRAGE IS JUST.

Editor American Elevator and Grain Trade:—We certainly believe reciprocal demurrage is right and just. We believe that it is necessary for the railroad companies to charge demurrage in order to protect themselves; on the other hand, we believe they should pay demurrage unless they protect the shipper within reasonable bounds.

In order to secure this by legislation or by agreement with the railroads, it would seem to us that it ought to be a reasonable proposition for the shippers and the railroads to get together and agree on a basis of legislation and then have such legislation put on the statute book. We do not know whether the railroads would care to enter into this kind of a thing. If not, then the only recourse, of course, would be legislation without their cooperation.

Yours truly,

Minneapolis.

A. F. BRENNER,
V.-P. Anchor Grain Co.

CAR SERVICE CHARGES JUG-HANDLED.

Editor American Elevator and Grain Trade:—The car service rules as now constituted are rather on the "jug handle" order—all on one side. In my humble opinion the railroads should pay for failure to transport cars from initial point to destination within the schedule time, as well as for neglect to furnish cars to a shipper beyond a stated term. Likewise, they should pay an equal amount to what they charge for car service for failure to switch cars within a limited time after same reach destination. There are so many impositions in this regard on the grain trade in general that the trade is much the greater sufferer. I believe in car service, and sincerely hope that it will never be repealed, for it aids greatly in facilitating the unloading of cars; but on the other hand, there are obligations on the part of transportation companies that should be fulfilled. With kind regards, I am,

Very sincerely yours,

Cincinnati, O.

F. F. COLLINS.

UNIFORM BILL OF LADING MONSTROUS.

Editor American Elevator and Grain Trade:—As the railroads charge for detention of cars beyond a stated time, they should, without doubt, pay for neglect to furnish cars to the shipper within a reasonable time. What is fair for one is fair for the other. As it is at present it is a one-sided affair; everything is for the benefit of the railroads. Instead of being operated for the benefit of the general public and not merely as private corporations, they seem to be run with a view of steadily putting on the pressure to see what a suffering public will stand.

Take the new uniform bill of lading. The forcing of this on to the shippers of this country is monstrous and would never be tolerated in any other country but this one of ours. The Interstate Commerce Commission is of no use to us. Its powers are limited. We should have one more department in the cabinet, a secretary of transportation, or else include this industry in the Department of Commerce with absolute authority to act. And before the railroads could force anything like this on to shippers it should be necessary to have it approved by this department of the government before it could be put into effect. We believe this would be a remedy. We think you will find that in Europe, where the railroads are not already owned by the government, that such matters have to be approved by the proper governmental department before they can be put into effect.

We consider the new uniform bill of lading of the most vital importance and one of the most im-

portant questions that has come up in years. Every shipper of whatever commodity should exert every power to defeat it.

Yours very truly,

Kalamazoo, Mich.

W. A. BUNTING & CO.

NOT WISE TO DEPEND ON LEGISLATION.

Editor American Elevator and Grain Trade:—We probably suffer as severely from car shortage at certain seasons of every year as any of the grain shippers in the country; but we do not believe it would be wise to try to improve the matter by legislation. And good railroad men tell us that not much will be gained by their making agreements to furnish cars, for they all claim they do everything in their power to prevent car famines, and that it affects them just as severely as it does the shipper.

It certainly is a serious matter; but we believe relief will be found for it eventually, if all the roads use their utmost endeavors to handle their cars promptly and return them promptly from the East. We think they are getting more particular all the time in regard to this, as they certainly must realize the importance of keeping an adequate supply of cars on hand for business that is offered them; but we doubt very much, if we threaten or fight them, that the situation would be improved any.

Yours truly,

Peoria, Ill.

T. A. GRIER & CO.

RECIPROCAL DEMURRAGE NOT JUST TO RAILROADS.

Editor American Elevator and Grain Trade:—In my opinion it would hardly be just to ask the railroads to pay a stated sum for neglect to furnish cars to the shipper as ordered, as it is often utterly impossible for them to furnish the cars. I think there are almost no cases, or at most very few, where railroads will fail to furnish cars when ordered, if it is in their power to do so.

They have enough equipment to handle their ordinary business, but cannot be expected to be able to provide equipment for extraordinary demand, especially when this extraordinary demand lasts only for a month or so out of twelve. I think, however, that railroads take an unreasonable time to move cars; and where a loss is sustained by their neglect to move promptly, they should pay at least a proportion of the loss.

In regard to whether reciprocal car service should be brought about by an agreement with the railroads or by state legislation, I am emphatically of the opinion that it should be made by an agreement with the roads, as we always find the railroad people ready and willing to meet us half way on any fair proposition; while by state legislation we would encourage their objection and displeasure, and more than likely that would defeat the aim we are after.

Yours truly,

Peoria, Ill.

WM. T. CORNELISON.

UNIFORM BILL OF LADING.

Editor American Elevator and Grain Trade:—To be as brief as possible, we consider the proposed uniform bill of lading as altogether unfair toward the shipping public, as the party after signing the contract relieves the carriers of responsibility. Should the shipper, however, decide to not conform to the conditions, he is obligated to pay a higher rate of freight, which, in our opinion, is unjust. This attempt to limit the carriers' liability at common law has placed the shipper in a very precarious situation.

We contend that the old rules governing the transportation of freight, being made by the transportation companies, afforded them all the relief that could be expected, but the new bill of lading affords them still greater relief, at the expense of the shipper. The shipper, of course, can accept the new bill of lading or he can leave it alone; but if he does accept it he assumes the risk of damage to his goods.

In so far as it affects the grain trade, we do not see that there has been any material changes af-

fectured as compared with former conditions now existing. Bills of lading should be considered as negotiable paper, and this one feature of the new document is a good one. Aside from that, we cannot endorse the conditions governing the new proposed bill of lading.

Yours truly,
W. H. PATTON,
Cor.-Secy. St. Paul Board of Trade.
St. Paul, Minn.

RECIPROCAL DEMURRAGE BY AGREEMENT.

Editor American Elevator and Grain Trade:—It seems to us that mutual agreement between the railroads and shippers is the only right and sensible way of handling this proposition of reciprocal car service, and if the railroads were inclined to be at all fair they would be willing to adopt the measure without being forced into it by legislation.

There is absolutely no argument that the railroads can advance in favor of demurrage that is not also applicable in every sense to the shipper's side. They claim that if we detain equipment worth \$400 we should pay \$1 per day. If the contents of this car are worth \$600, why should they not pay us a dollar a day for detaining our shipment a reasonable time? If the railroads are busy and unable to supply equipment, they claim it is a good reason for not moving our shipments promptly or furnishing us cars promptly. They will not consider our arguments. They will not throw off any demurrage if we were to tell them goods came in faster than we were able to handle them in the time limit. And so on down the line. Every argument they have in their favor applies equally to the shipper in favor of reciprocal car service.

In regard to the method of reaching results, it is our belief that the railroads in this country would consider absolutely nothing but what they are compelled to consider. They feel that a shipper has no rights because he is "small fry" as compared with the railroad. He cannot build a railroad to haul his own goods, and it is a matter of doing their way or not doing it. We doubt little if state legislation could be brought about in this state, but in farming states like Nebraska and Kansas it seems that there should be no trouble.

Very truly yours,
Denver, Colo. G. ADY & CO.

MILLER WANTS IT ALL.

Editor American Elevator and Grain Trade:—The miller and the grain dealer are no kin. In Texas the miller doesn't "sorter want" to divide up the wheat with the grain dealer, but simply wants it all. Furthermore, we hardly think as a general rule they tote fair with the dealer. They will buy what they can from dealers on their own weights and grades, and it is not often the case that they are any too liberal on either. On the contrary, they are very rigid in both respects; at the same time, a good old brother from the forks of the creek will bring in a load of 56 or 57 pound wheat, and Mr. Miller will probably take it for No. 2, or, at any rate, very close to a No. 2 price.

We are compelled to think that some of our millers have honestly gotten it into their heads that the grain dealer shouldn't fool with wheat at all, and there is no question in our minds but that they make it just as interesting in every way possible for the grain dealer as they can. We think in the course of a short time the grain dealers of Texas, as well as of other states, will be forced to erect one or more flouring mills at central points in order to bring about some better understanding relative to the handling of wheat than there is at present, from the fact that a good many of our mills are now virtually doing a grain business, handling oats, corn, etc.

In the course of time, when we get elevators pretty generally over the state, we think every dealer should positively refuse to sell millers except on their own weights and grades and not on millers' weights and grades. There is no reason why an experienced grain man cannot test and weigh wheat as correctly and as properly as a mill. Some 90 per cent of the mills have track scales,

and we would have to be shown, like the Mis-sourian, that such weights are as near accurate as hopper scales weights.

Yours truly, WAXAHACHIE GRAIN CO.
Waxahachie, Texas.

THE NEWS FROM INDIANA.

Editor American Elevator and Grain Trade:—Goodrich Bros. of Winchester have sold their house at Lynn to Owens Bros., formerly located at New Madison, Ohio. They have recently sold their elevator at Clarks, Ohio.

R. G. Risser of Kankakee, Ill., interested in two elevators at Oxford, and operating as Risser & Anderson, has purchased Mr. Anderson's interest, and the business is now operated in his own name. Mr. Anderson remains as manager.

J. M. Horning of Greensburg bought back the elevator at that place, which he sold E. K. White about a year ago and sold it at once to another party. Mr. White continues in flour and feed business at Greensburg.

M. A. Current, State Line, has sold his elevator to a new firm of Finch, Finch & Lynch.

Lyons, Esson & Light of Brook, operating five elevators on the C. & E. I. R. R., have sold the one at Mt. Ayr to the firm of Ponsler & Johnson.

Crabbs-Reynolds-Taylor Co. of Crawfordsville are building at the following points: Lapland, Wheelers and Crane. All these plants will be thoroughly modern and up to date.

Arnold & Engler of Pennville have recently started their new 20,000-bushel elevator. This is a station on the new Cincinnati, Bluffton & Chicago Railroad.

The Petroleum Grain and Lumber Co. is a new company organized at that point to do a lumber and grain business. Their elevator under contract by N. A. Grabill Co. will be completed in 30 days. Their capacity will be 15,000, and equipped with a Western Sheller and Constans Cleaner.

RECIPROCAL DEMURRAGE.

Editor American Elevator and Grain Trade:—There are so many unjust features about the present manner the carriers have of handling demurrage that it is impossible to treat the subject briefly and do it justice. We can only consider a few of the essential points.

For several years the practice of charging consignees and consignors demurrage for delay in loading and unloading cars has been in vogue; and, although the capacity of cars has increased to twice the size, the same free time is allowed now as in the beginning. No consideration is given for the extra labor required to load and unload these large cars.

Until recently the rules of the car service associations were more or less indifferently enforced, but when the rule requiring a locomotive to haul a train of maximum tonnage was adopted the delays to cars by the carriers themselves were so frequent that the demand for empties was increased. Consequently, the screws were put down on the patron, with authority for cancellation of charges taken away from the traffic departments (the business-getting end) and put into the hands of the managers of the illegally constituted organizations (the so-called car service associations). You appeal your case to the one most interested in seeing that the charges stand. The accuser is your judge and executioner.

Sufferers from these impositions, and from long delays in getting empty cars to load and delays of property in transit and at terminals after arrival, are demanding reciprocal demurrage and asking the legislatures in several states to correct these abuses by requiring the carriers as well as the consignees and consignors to pay a penalty for delays to cars or property. The justice of this demand cannot be denied, and yet the carriers oppose the proposition in spite of their claim that the charges are solely for the purpose of making empty cars to supply a demand, creating the suspicion that their claim is false and that this is another method of raising revenue.

The carriers seem to think they are attacked

the instant a suggestion is made for the change of a rule by the shipping public, and, as usual, in this case mix abuse and half truth as argument in defending their position, saying that the demand for reciprocal demurrage only comes from "people with offices in their hats"; and this in view of the fact that every trade convention and nearly every organization composed of shippers has passed resolutions favoring it. In defense of our humbler suppliants, let us say that the carriers forget that in delaying the furnishing of an empty car they are using the shipper's warehouse for their convenience to hold property in store until they can find their own storage—an empty car. In comparison with the business done and the interests served, the facilities of the smaller shippers compare favorably with those of the carriers.

Another argument used is that the courts have held that demurrage is a legitimate charge. On examination of these decisions it will be found that they are based on public policy; that the public needs the empty cars; therefore, they should be unloaded promptly. How much quicker would this demand be supplied if the carriers performed their duty as promptly as they expect the shipper or receiver to perform his! In 1902 the average distance a loaded car moved per day was 16 miles. Should they not move at least 50 to 80 miles per day? If they did, the demand for empty cars



ELEVATOR OF J. C. LUSCH & CO., ACKLEY, IA.

would be supplied three to five times as quickly and thus would be greatly relieved a situation the carriers themselves claim to deplore. Virginia has a law which has corrected these abuses within her boundaries and it works well. Other states and the nation at large can do the same.

The longest delays, consequently the greatest hardships and losses, occur on interstate traffic on account of the long distances the shipments move. In proportion to the distance, these delays are much greater, due to negligence by the carriers at traffic points; so the situation will not be much relieved until we have a national reciprocal demurrage law.

Come out boldly for it. Don't cringe. "The Lord hates a quitter."

Yours truly,
St. Paul, Minn. G. S. LOFTUS.

J. C. LUSCH & CO.

J. C. Lusch & Co. of Ackley, Iowa, who succeeded the J. A. Carton Co., have an old and well-established business, whose buildings are an evolution, or growth, as the business extended from year to year since 1882, when the present elevator was built.

The main house and attached warehouses have storage capacity for 60,000, or perhaps a little more than that amount, and though it has been in use for nearly a quarter of a century, it has always been kept in first-class repair and is still an excellent country elevator.

The power is a 25-horsepower electric motor, the power current being furnished by the local electric lighting company.

Be friendly; write often, and give the news,

WILLIAMS AUTOMATIC SCALE AT THE ST. LOUIS FAIR.

As noted a short time ago in these columns, when the Williams Automatic Bagging and Weighing Machine was described in extenso, would be the case, this machine is now on exhibition at the St. Louis World's Fair, a picture of the exhibition space being given herewith. The exhibit is located at Sec. 121, Agricultural Building, and is in charge of Mr. J. B. Williams, president of the company. It is the only automatic bagging and weighing machine in operation at the exposition.

It is gratifying to note, further, that while the machine is practically new, and quite so to the grain trade, it is having a wonderful success. It is used, as the reader will remember, for weighing in bulk, such as loading cars, ships, etc., and weigh-

places the enforcement of the law in the hands of the state agricultural commissioners. A standard of excellence is prescribed and it is further provided that the standard shall be maintained by means of official analysis and a state license for each brand manufactured. Packages must be branded with a statement of their contents, and even farmers are not allowed to mix several kinds of feed and sell the mixture without first submitting an analysis and procuring dealers' licenses.

WHEAT GROWING IN CALIFORNIA.

Californians have awakened to the fact that wheat growing in that state has reached its climax, and that steps must be taken to revive the industry if it is not to disappear as a factor

and is mixed with the wheat. Club wheat is well known to all men in the business. To describe it best is to say that it is a very poor article, lacking in gluten and containing an excess of starch. It has a short straw and stands longest in the ear during the dry summer. Australian wheat, for instance, would shell off if left as long in the fields as the California farmer leaves the Club wheat. Conditions are such that the farmers have to leave their wheat standing for a long time, waiting the coming of the harvester which they do not own and is occupied in harvesting the wheat of a large area. That is one reason for the preference farmers have for Club wheat. And yet they do not get as much for it as they would for a good, strong wheat. They are running more and more to Club wheat, which makes the meanest, poorest flour that can be raised. We might as well face the facts and be over with it as to go along and wink at them, for the whole state is running to Club wheat, and things have got to a point where we cannot run mills without using Club wheat."

In order to inaugurate a reform, the millers of California have agreed to donate \$500 to enable Professor Shaw of the University of California to ascertain by experiment whether California wheat cannot be made to possess a greater percentage of gluten by the process of selection. The State Board of Trade has decided to expend certain sums of money to import seed wheat from countries where the grain has much gluten, the purpose being to distribute the seed among farmers to see what results can be achieved. The experiments in selection to be carried on by the University of California will take several years of work. In the meantime immediate results may be brought about by the use of fresh seed.

The California millers are, in short, in the position of the English millers who have to rely on home-grown wheat—they must buy a "foreign" wheat to blend to give strength, the native wheats giving "color" only; so that the interior British mills buy foreign wheats for strength, while the port mills, who use all foreign wheat, take kindly to our "Californians," because it gives in the blends the color so much desired by the English flour user.

WEIGHT SUPERVISION AT EAST ST. LOUIS.

As this paper went to press for its issue for August, the master in chancery at St. Louis, on complaint of the Illinois Railroad and Warehouse Commission, granted a temporary injunction restraining all agents of the Merchants' Exchange of St. Louis from weighing or supervising the weighing of grain in East St. Louis, or from interfering with the state weighmaster and his assistants in their work of weighing grain. The injunction did not, however, go to the limit of preventing the representatives of the St. Louis Merchants' Exchange from standing by and seeing the weighing done and taking memoranda and certifying to the fact that the weights were in each case so much. While this is a victory for the complainants in so far as the mere granting of the injunction is concerned, it deprives the Merchants' Exchange of no real power, and its supervisors are still able to and do see the weighing done, and certify to the weights and state the condition of the cars.

The bill presented by the Commissioners in asking for an injunction gave many reasons why it is claimed the St. Louis weighers have no authority on the East Side. The Illinois statute creating the Railway and Warehouse Commissioners is cited, and from it the bill argues that no certificates of weight of grain shall be issued except by the regularly authorized appointees of the Commission. The bill further maintained that the work of the Illinois officials has been satisfactorily done, and yet, it states, the weights and supervision of weights have not been accepted by the defendants. The plaintiffs claim that the certificates issued under their authority are merely affixed to the certificates issued by the Exchange weighers.

These allegations are denied in the answer filed

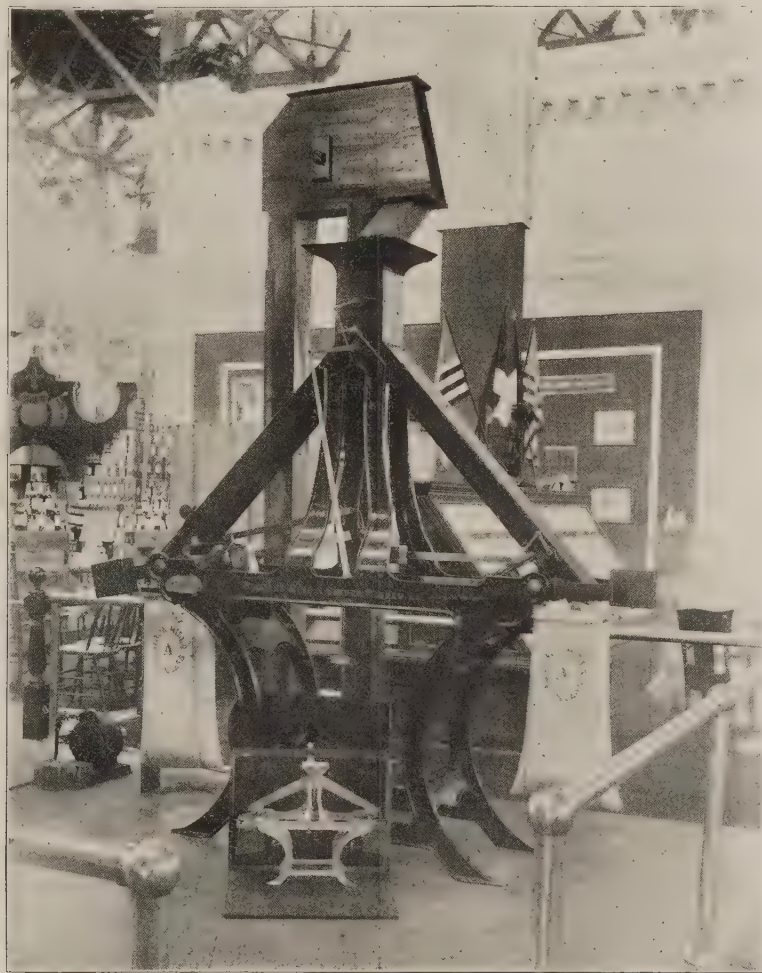


EXHIBIT OF THE WILLIAMS AUTOMATIC SCALE AT THE ST. LOUIS EXPOSITION.

ing loose grain into elevator bins, mills, etc. The grain or other material is fed into the hopper and flows down through chutes into the receptacle, and after the predetermined quantity has been delivered thereto, the scale beam tilts, shutting off the supply of grain and directing it through the opposite chute, at the same time automatically dumping and registering its charge, requiring no operator whatever. These machines are very fast and can be built to weigh up to any capacity. They are also built for weighing and filling packages of cereals, starch, coffee, soda, baking powder, etc., of from one to ten pounds.

Very recently a new and strong corporation has been organized to put the machine on the market, and the factory at Minden, La., is working to full capacity to take care of the demand.

The company's representative at the exposition will be glad to see visitors, to whom he will take pleasure in showing and explaining the machine in detail.

The New York law governing the sale of concentrated feeds, which went into effect on May 1,

of the state's agricultural wealth. It is true that the diversification of farm crops has reduced the acreage of wheat; but the real reason of the decline of wheat growing from its former importance is said by Horace Davis, a prominent miller and flour dealer of San Francisco, to be due to the fact that the quality of the grain has so depreciated that it has largely lost its value as a milling grain.

The perennial succession of Club wheat and slipshod methods, said Mr. Davis, has made California wheat deficient in those qualities that are essential for making good salable flour and nutritious bread. The result is the local milling firms are compelled to import large quantities of wheat from the Middle West, from Kansas and Dakota, to mix with the California grain for the purpose of bringing the flour up to the desired standard of strength.

"California wheat growers do not take enough interest in their seed," said Mr. Davis. "They do not clean it nor select it, and in consequence a large amount of wild oats and barley has grown year after year over the land in volunteer crops,

by the defendants. It is asserted that they never attempted to supervise the work of the Illinois weighers, but merely stood by when the weighing was done, to satisfy themselves that there was no error.

The case is said by the Illinois Commissioners to involve certain weighty questions of constitutional law, and will be carried to the State Supreme Court for final decision thereon.

SCALES: THEIR MAKERS AND DISTRIBUTORS.

[A paper by H. A. Foss, prepared for the Iowa Grain Dealers' Association, and read on May 17, 1904.]

When Mr. Wells informed me that he expected representatives of scale makers and dealers from all over the country to attend this meeting, it struck me that a more opportune time could not possibly occur to bring up some facts that are working great harm, both to the scale makers and their customers. Please understand that whatever criticism I make in the course of this paper is not with any intent to antagonize the scale people, my sole object being to better conditions and to correct the abuses extant. I shall refrain from personalities, but at the same time I am prepared to substantiate any and all statements I may make. If any resolve to correct the present commercial methods shall result from this paper, I cannot but feel that we shall all be benefited.

As I have stated before, scale tests are made to establish the accuracy of a scale or to detect quickly the cause of inaccuracy, where it exists. How can one expect a scale to work properly which is made of material incapable of standing the strain imposed upon it, or fitted with bearings composed of hard loops and soft pivots or soft loops and hard pivots?

There never was a time when so much worthless scale material was being imposed upon the unsuspecting public and country grain shipper as now. Never before has there been such a wholesale installation of useless weighing machines, many of which carefully hide the maker's name; sometimes supplanting it by that of the dealer. In these scales, the workmanship is far below standard, with cast and malleable iron substituted where the best quality of steel is necessary. If steel is used, it is of a poor quality and either poorly tempered or not tempered at all, and parts that should be forgings inlaid with finely tempered steel are made of cast or malleable iron, thereby causing a premature wearing or cutting of the parts. This destroys the sensitiveness of the scale and makes it difficult to determine its accuracy, for the reason that any variation would not be perceptible without an unreasonable number of weights, and even then it would be extremely hard to determine the amount the scale might be out of adjustment. Then again, the loops or clevises are not provided with guards, which are essential to the free action of a scale by reducing friction, and often the entire side of a loop is found binding against a lever. The saving of material in construction, too, is a great detriment, as it weakens the scale so that permanent alignment is not assured. Accuracy is sacrificed to cheapen the price, and the scale, generally, is built so that its principal product is trouble rather than correct weights.

To the average observer, these scales appear much the same as a first-class product, nor is there a scale expert who can overcome their defects. The best he can possibly do is to make adjustments, and this, if done daily, would only insure temporary accuracy. Such cheap imitation of machinery upon which so much depends can only lead to contention and ill-feeling. No guarantee can make a poor watch keep good time nor a sloppy scale deal out just weights.

Again, many scales are installed that apparently have never been sealed; at least, the fact that new scales are frequently found considerably out of seal would indicate that such was the case. Nor is sufficient care used in the sealing of the beams; for while it is important that the notches in all

beams be correctly sealed, it is far more so in compound notched beams, where the graduation is so much greater. In these beams, each and every notch must be accurately sealed, for there is danger that at some time the scale will be adjusted to a false notch if there is one, which might prove to be a serious matter. To illustrate the carelessness that is sometimes very apparent in the manufacture of scales, I know of three scales, the beams of which are incorrectly marked, one reading "800" pounds in two places, the figures "900" being omitted; while on the other two, the "1800" is omitted and the figures "1600" are duplicated.

No scale, regardless of its make, or by whom installed, should be accepted or used until it is tested, the test to be made after the scale is set up and ready for use. It is a common occurrence for shippers and elevator builders, and even scale manufacturers, to install scales without proving their accuracy by testing. In fact, manufacturers often contend that the sealing of scales in the shop is sufficient to insure their correctness after installation. My experience, however, has proven this theory to be incorrect.

When installing a scale, the purchaser should see that it carries the name of the manufacturer. As stated above, it is often customary for distributing houses and dealers to place their names on scales they handle instead of the names of the manufacturers. Purchasers of scales should insist that the scales they buy bear the name of the manufacturer, so that they may know there is the responsibility back of them which can come only from those who intend to continue in the scale business. The supply houses and jobbers can drop any line of goods that is unsatisfactory without serious damage to themselves, while scale makers cannot afford to put out rotten goods under their own names if they hope to continue in business.

Scale dealers and elevator builders should advise against installing scale where conditions do not assure permanent accuracy, for instance, on timbers or foundations which are not sufficiently strong and rigid. A mud plank foundation is cheap in construction and costly in results. They should also refuse to install a scale where it would be inaccessible to tests and impossible to test properly. When installing a scale, the convenience of the beam to the weighman should be a secondary consideration. Long extensions should be eliminated. The practice of locating a beam at a distance from the hopper or platform is a bad one, as the additional levers necessary add to the already large number of bearings, thereby greatly increasing the chance for error and detracting from the sensibility of the scale.

Then, too, a large percentage of the men who build and adjust scales are incompetent, and the many carpenters and millwrights who attempt this work are daily adding to the troubles of the grain man. With them it is a common mistake to jack up scales before testing and to make adjustments without finding the cause of the trouble, which is a real, physical and wrong condition or position of the foundations, levers or bearings and promptly recognizable as wrong when once located. This is a bad practice, as the scale will soon settle back to its old position, and the trouble, which has been temporarily remedied by jacking up, or adjusting, will soon crop out again, leaving the scale in as bad if not a worse condition than before. In this way incompetents throw away the very opportunities which skillful scalemen eagerly seize upon. Bear in mind that when a scale is weighing incorrectly, the cause must be located and remedied before attempting any adjustment of the levers.

The manufacture, sale and installation of cheap and loose-jointed scales by careless and incompetent men has led to a carelessness in the use of test weights which is amazing. The number of parts, and likewise the chances for error in handling a complex scale, are both large. It is evidently the part of wisdom, then, to eliminate one chance for error in testing such a scale, and

to this end test weights are used which are prepared and sealed up to the exact 50-pound standard with the utmost care. In testing with such weights, therefore, the careful scaleman has one thing to depend upon. He can take it for granted that his test weights are right. He does not have to prove his test weights by his scale and then prove his scale by his test weights. Test weights, therefore, are not mere blocks of iron and should not be exposed to the elements or rough usage and should be sealed at least once a year. We seal ours at Chicago four or more times a year. There are test weights used in the adjusting of scales owned by men who have no idea of the date of the last resealing.

In closing my remarks I think it well to emphasize the use and abuse of test weights by quoting from letters selected from a number in my possession from the various scale companies, which illustrate some of the bad commercial methods employed by them. These letters are from every leading scale company and are in answer to inquiries from shippers as to the price of a 50-pound test weight for testing their wagon scales and how to use same. Before going any further, I want to say that one 50-pound test weight is absolutely of no value in proving the accuracy of or testing a wagon scale, either with or without a load, and scale companies and supply houses should so inform their patrons, instead of leading them to believe that a 50-pound weight is sufficient by quoting them a price. As stated in my previous paper, four-ton scales should be tested with not less than 1,000 pounds of weights, while on track and large hopper scales at least 4,000 pounds should be used.

The first letter, which is from one of the most active scale companies in the country, reads as follows:

"Dear Sir:—Your favor of the 24 inst. has been received and we note that you require one 50-pound U. S. Standard Test Weight with which to test your wagon scale. We beg to advise you that we will furnish you with this weight for \$2.25. Should you decide to order same from us, kindly remit with the order and we will have the weight forwarded to you at once.

"Hoping to be favored, awaiting your reply, we are,
Yours truly."

Another prominent scale company writes:

"Dear Sir:—We are in receipt of your favor of the 22d, and note that you are desirous of testing your scale and for that reason wish a test weight. For your information will state that test weights are made up from the United States Standard in 50 pounds each, for which we charge, f. o. b. factory \$2.50 each for each 50-pound test weight. We believe, however, that the same end can be accomplished by using a rock or iron of that weight or even heavier, which you can weigh on a small portable scale you know is correct. It is, of course, immaterial whether this rock or iron will weigh 50, 60, 68 or 100 pounds or even more, so long as it is some article whose weight will not vary by a little handling. After getting the exact weight, place it on each of the four corners of your scale, then on the center. If you find that it agrees with your weight, then put a wagon on your scale, weigh it and again add the weight you are testing with. If your scale still shows the correct weight by adding your weight after weighing the wagon, your scale is correct up to that capacity; and in case you are still in doubt, haul a loaded wagon on your scale and again add the test weight. If the increased weight again shows the correct addition you may conclude that your scale is correct."

One of our Chicago mail order houses advertises in its catalogue as follows:

"A 50-pound test weight sealed by an authorized sealer of weights, which can be used to test any scale. On cars at Chicago \$2.30."

Another house of the same sort closed its letter by saying:

"Hoping that this weight will meet with your requirements, and hoping to be favored with your order which will have our best attention," etc.

As further evidence of misrepresentation on the part of the scale people, I quote you from a letter received from a grain dealer regarding his scales:

"We have an additional way of proving their accuracy. We weigh the load and then a man gets into a car, and if we are able to weigh the man accurately, that indicates that the load was weighed accurately. When the car is empty, that is again weighed and then the man is weighed. This is

done with every car that we unload and the scale makers tell us that there is no better proof of accuracy than this."

In view of what the scale makers and dealers really know of the necessary methods of making tests and the absolute need of using large amounts of accurate weights, such letters are misleading in intent and serious in effect. From using such minimum weights down through suggestions to try a rock or a man as a test, it is but a short step to guess at weights. Furthermore, inaccuracies and guesses are, 90 per cent of them, in favor of the man who owns and operates the guessing machine. Inaccurate scales, if they do not lead to dishonesty, certainly lead to misunderstanding and trouble, which scale makers and dealers should, of all people, work to eliminate.

ROBERT B. CLARK.

The elevator and annexed buildings shown in the accompanying engraving picture are premises of Robert B. Clark at Eagle Point, Wis., one of four houses owned by Mr. Clark, the others being at Chippewa Falls, his headquarters, and at Bate-man and Anson.

At all of these houses he handles potatoes, apples, flour and feed, as well as hay, grain and seeds, together with coal and lime. His buildings are, therefore, of necessity more comprehensive than those of the ordinary grain station.

The grain elevator in the picture is 24x24 feet



BUILDINGS OF R. B. CLARK, EAGLE POINT, WIS.

on the ground and will store 20,000 bushels, its machinery being operated by a gasoline engine. It was built last season by the Barnett & Record Company of Minneapolis, and is of course a first-class house.

The potato storage attached is 48 feet square, with a basement, and will take care of fifty carloads of the "spuds."

Several successful efforts to grow winter wheat in South Dakota this season are turning the farmers' attention to that subject.

Millers find on actual test of new northwestern wheat that much of it is going to be uneconomical to mill—it takes more wheat to make a barrel of flour and the flour is not satisfactory.

Kansas broom corn buyers have organized the American Warehouse Company to handle the brush grown in Nebraska, Missouri and the Southwest. Robert Findlay of Sterling is president.

Dan'l J. Sully, whose meteoric career as a speculator in cotton is still remembered, makes a new start by organizing the Southern Cotton Corporation, with a capitalization of \$5,000,000 preferred and \$15,000,000 common stock.

The preferred stock is to be put out at \$100 a share and the common at \$20 a share, and the official statement of the company's formation announces that the concern is expected to be taken largely in the South. The company's objects are to introduce Mr. Sully's improved mechanism for ginning cotton and to establish a comprehensive warehouse system, which will enable growers to hold their cotton if they desire without being obliged to sell it at times when the market is glutted.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Sufficiency of Seed-Lien Description.

The Supreme Court of South Dakota says (Schouweiler vs. McCall, 99 Northwestern Reporter, 95) that by Section 731 of the Code of Civil Procedure it is provided that any person who shall furnish wheat or other grain to be sown or planted upon any land owned, used or occupied or rented, shall have a lien only upon the crop produced from the kind of seed furnished by said person upon the land aforesaid; and that by Section 733 such person shall make an account in writing, stating the kind of seed furnished, the person to whom furnished, and a description of the land upon which the same has been or is to be sown.

It would be, it seems, sufficient, therefore, to set forth the amount of seed furnished and a description of the land upon which the same is to be sown, and that description may include one or more tracts of land within the same county. Where seed is furnished to a party renting or occupying different tracts of land, it might be difficult to determine in advance the precise amount of seed that was to be used upon any other tract; and it would be imposing an unnecessary burden upon the party furnishing the seed to require him to specify the precise number of bushels furnished for and sown upon any one tract where the seed furnished is used upon different tracts.

Validity of Mortgage on "Growing" Hay.

A chattel mortgage dated July 9 described the property it covered as "90 tons of hay now growing, same to be cut and baled and delivered at Bertrand subject to order of party of second part, this mortgage to cover hay on place or cut and stacked, baled and delivered in Bertrand, Neb.; hay to be delivered loose at option of party of second part; the above-described chattels are now in my possession, are owned by me, and free from all incumbrances in all respects, on lots 6, 7 and 8, section 4, town 9, range 20, Dawson County, Nebraska."

It appeared there were no lots numbered 6, 7 and 8, in section 4, in town 9, and that no land in such section was owned or occupied by the mortgagor; but that he owned and occupied land correctly described as lots 6, 7 and 8, in section 4, town 8.

Less than 90 tons were produced on this tract that year. It was put up after the mortgage was made, and was in possession of the mortgagor when levied upon under an execution on a judgment against him.

A statement made by the mortgagor to the levying officer, that the hay was mortgaged, the commissioners of the Supreme Court of Nebraska say (Hayes vs. First State Bank, 98 Northwestern Reporter, 423) could not affect the right of the judgment creditor, unless the latter had the constructive notice required to statute in Nebraska in the filing of the mortgage, but it was a circumstance tending to show that the hay in question was the hay intended by the description in the mortgage. And the commissioners think the mortgage was sufficient, notwithstanding the mistake in the description, if a mortgage upon growing grass, stipulating that it should cover the same when cut and stacked, is good on the hay in stack against an execution creditor when the mortgagor is still in possession, as they seem to hold.

It was urged that because at the time the mortgage was made the so-called "hay" was growing as wild grass it was a part of the realty and could not be the subject of a chattel mortgage; but the commissioners say that the record failed

to show that it was wild grass, and the mortgage would be treated as one upon a growing crop. A chattel mortgage upon a growing crop is a valid lien upon the same crop harvested against the claim of a purchaser with notice. If it creates such a lien, it should be held good against the levy of a creditor when the mortgage is on file and the crop is in a situation to show that it is the mortgaged crop. Common knowledge teaches us that hay in stacks in the field, soon after being put up, will bear evidence to the fact that it is of the new crop.

In short, the decision is that the lien of this mortgage was superior to that of the levied execution.

Classification of Railway Elevators for Taxation.

Sec. 39, Art. 1, Chap. 77 of the Compiled Statutes of Nebraska of 1899 requires railroad and telegraph companies to make certain returns to the auditor of public accounts for taxation; "provided, however, that all machine and repair shops, general office buildings, storehouses, and also all real and personal property outside of said right-of-way and depot grounds as aforesaid, of and belonging to any such railroad and telegraph companies, shall be listed for purposes of taxation by the principal officers or agents of such companies with the precinct assessors," etc.

An elevator, the Supreme Court of Nebraska holds (Adams County vs. Kansas City & Omaha Railway Co., 99 Northwestern Reporter, 245), is a storehouse within the meaning of said Section 39. It holds that the phrase, "outside of said right-of-way," etc., in the proviso to said section, qualifies only the word "property" immediately preceding it and not the specific terms used in the enumeration of other classes of property therein. By virtue of such proviso, elevators situate on the right-of-way of a railroad are subject to assessment by the local authorities and not by the State Board of Equalization, and that they may be necessary for the successful operation of the road is immaterial. The owner of such elevators cannot escape local assessment thereon and taxes levied in pursuance thereof by voluntarily listing and returning them for taxation to the auditor of public accounts and the payment of the taxes levied by the State Board.

Duty in Furnishing and Apportioning Cars for Grain Dealers.

It is the duty of a railroad company, the Supreme Court of Nebraska holds (State vs. C. B. & Q. R. Co., 99 Northwestern Reporter, 309), to furnish the necessary cars to transport the goods which are offered to it for carriage; but when the carrier has furnished itself with the appliances necessary to transport an amount of freight which may in the usual course of events be reasonably expected to be offered to it for carriage, taking into consideration the fact that at certain seasons more cars are needed, it has fulfilled its duty in that regard and it will not be required to provide for such a rush of grain or other goods for transportation as may only occur in any given locality temporarily or at long intervals of time.

It is the duty of a railroad corporation, both under the common law and by statute in Nebraska, to supply cars to all persons or associations handling or shipping grain, without favoritism or discrimination in any respect whatever.

During a temporary scarcity of cars a railroad company is entitled to consider, in apportioning cars among grain dealers, their relative volumes of business and facilities for the loading of cars. Though there may be a difference in the number of cars furnished different grain dealers at the same railroad station, still, if no favoritism or discrimination is shown and the number of cars furnished each is in a fair proportion to his volume of business, facilities for loading and grain in sight, no shipper has a right to complain of this difference, although he may not obtain all the cars he deems necessary for his business.

San Francisco is already a liberal buyer of Oregon and Washington wheat.

COST OF HANDLING GRAIN AND FLOUR.

The cost of terminal handling is one of the large items of transportation expense. It is that item which especially differentiates the expense of transporting different commodities. The Wall Street Journal of August 6 gives the following figures as the cost of handling grain and flour of one of the trunk lines through the Buffalo gateway. Where the service is performed by the railroad, the expense of maintenance, interest and depreciation of the plant is not in the figures:

Chicago handling cost on grain en route, Chicago to New York, ship's side, cost per ton 2,000 pounds:	
Trimming	\$.0269
Weighing .....	.0013
Buffalo elevators (elevation, storage, discharging and trimming in car, but not the expense of shoveling to base of elevator leg) .....	.1785
Grain door, 32 tons per car .....	.022
New York expenses (allowing for full ten days' storage):	
Elevating and discharging .....	.175
Lighterage Service—	
Canalboat hire .....	.21
Towage .....	.098
Wharfage .....	.014
Tallying and weighing at delivery .....	.015
Trimming .....	.019
Shortage—	
New York harbor .....	.018
Buffalo to New York, 110 pounds per car at 40 cents per bushel .....	.03
Total cost per ton	\$.8407
Total cost per bushel of 56 pounds .....	.0235
Handling costs on export flour per ton, Chicago to New York, ship's side:	
Loading to vessels, Chicago	\$.38
Unloading from vessels, Buffalo .....	.175
Loading to cars, Buffalo .....	.17
Unloading to piers, Jersey City .....	.10
Loading to lighters, Jersey City .....	.11
Lightering (average of 7 days, or 140 tons to a lot) ..	.20
Attaching tackle for hoisting over ship's side .....	.05
A car of wheat generally contains 150 per cent, the tonnage of a car of flour, therefore flour costs about 30 per cent more per ton in train expense for handling dead weight. This on the basis of 32 cents total train expense per mile, 1,000 tons gross and 400 tons net per train and 450 miles, Buffalo to New York, is	\$.069
In car hire it is .....	.064
Total expense per ton	1.318
Total expense per hundredweight .....	.0659
Total expense per barrel, 196 pounds .....	.1292

NO. 4 WHEAT IN MINNESOTA.

The Minnesota inspection department has created a No. 4 grade of wheat in effect September 2. The new grade is placed between No. 3 and rejected. The qualifications call for a weight test of from 49 to 53 pounds. This grade will take care of a large part of the shrunken and light-weight wheat now coming in. Before the grade was made a great deal of the new wheat coming in was put into the rejected grade, but the establishment of the new grade will relieve the rejected column of a good many cars that, while not coming up to the requirements of No. 3 wheat, contain wheat better than rejected.

The department also abolished the use of the word macaroni, substituting therefor the word "durum" as the official name of the macaroni wheat grades. The department has also established an extra grade for durum. Last year they were Nos. 1 and 2 and rejected for macaroni wheat. No. 3 durum has now been established. The new grade was made to meet cases where macaroni may be mixed with other varieties of spring wheat.

The rules as changed are as follows:

No. 4 Spring Wheat.—No. 4 Spring wheat shall include all inferior spring wheat that is badly shrunken or damaged and must weigh not less than forty-nine pounds to the measured bushel.

Note.—Hard, flinty wheat, of good color, containing no appreciable admixture of soft wheat, may be admitted into the grades of No. 2 Northern Spring, No. 3 Spring wheat and No. 4 Spring wheat, provided that the test weight of the same is not more than one pound less than the minimum test weight required by the existing rules for said grades, and provided further that such wheat is in all other respects qualified for admission into such grades.

Rejected Spring Wheat.—Rejected spring wheat shall include all spring wheat grown badly, bleached or for any other cause unfit for No. 4 wheat.

No. 1 Durum Wheat.—No. 1 Durum shall be bright, sound and well cleaned, and be composed of Durum—commonly known as Macaroni wheat.

No. 2 Durum Wheat.—No. 2 Durum shall include wheat that is bleached and shrunken.

No. 3 Durum Wheat.—No. 3 Durum shall include

all wheat that is badly bleached, smutty, or for any other cause unfit for No. 2.

Rejected Durum Wheat.—Rejected Durum wheat shall include all wheat that is very smutty, badly bleached and grown, or for any cause unfit for No. 3.

Mixed Wheat.—In case of admixture of Durum, Western Winter or Western White and Red wheat with Minnesota grades of Northern spring wheat, or with each other, it shall be graded according to the quality thereof, and classed as Nos. 1, 2, 3, etc., "Mixed Wheat," with inspector's notation describing its character.

D. C. WEST, WYOMING, NEB.

The elevator of D. C. West at Wyoming, Neb., was built by M. J. Travis of Atchison, Kan. It is a box building 54 feet high from bottom of pit to extreme top, standing on a foundation of limestone 30 inches thick at the bottom and 18 inches on top. The main building is 22x26 feet in size, with an attached driveway 9 feet wide. The engine (gasoline) room is 10 feet square.

There are four storage bins, a shipping bin and double automatic-lock dumps, with capacity of about 600 bushels. Everything is hoppers, to avoid shoveling or sweeping of bins.



ELEVATOR AND OFFICE OF D. C. WEST, WYOMING, NEB.

The total storage capacity is about 10,000 bushels.

Mr. West handles live stock as well as grain, and has no complaint to make of his treatment by the farmers of his neighborhood.

INSPECTION OF MANITOBAN WHEAT IN 1903-4.

The chief grain inspector of Manitoba has published a statement of the amount of grain inspected by his office at Winnipeg for the crop year 1903-04, ended August 31, compared with 1902-03, from which the following summary is taken, the figures representing cars:

Wheat—	1903-4.	1902-3.
One Hard	557	21,757
One Northern	7,065	14,432
Two Northern	10,794	6,378
Three Northern	11,720	6,359
Number Four	3,369	1,718
Feed	1,569	322
Rejected One	561	420
Rejected Two	408	266
No Grade	1,604	116
Rejected	148	41
Feed Two	632	...
Condemned	46	24
Total Wheat	38,473	51,833
Oats	1,129	2,036
Barley	161	471
Flaxseed	536	655
Speltz	2	10
Grand Total	40,301	55,005
C. P. R.	30,969	43,333
C. N. R.	9,332	11,672
Grand total, cars, 1901-02, 57,500; 1900-01, 15,405; 1899-1900, 33,663.		

Fire in the ruins of the seed house of J. Bolganio & Sons was still burning on September 3, a reminder of the great Baltimore fire of February.

THE HARROUNS IN TROUBLE.

The distressing story was telegraphed from St. Joseph, Mo., on September 9 that W. M. Harroun of the Harroun Elevator Co. had made the statement that during the past six months he had been guilty of forging a large number of bills of lading on the Burlington system, out of which he had realized \$137,000. This confession was made public by Judge O. M. Spencer, general solicitor, who said that many banks in Chicago, St. Joseph, Omaha, Kansas City, St. Louis and New York had suffered, the chief creditor being the Union Trust Co., whose claim is \$100,000. Mr. Spencer added:

Later in the day I understood he confessed to other attorneys that the forgeries would aggregate \$400,000, and possibly more. Mr. Harroun said he and his brother had lost a quarter of a million dollars on the stock market in Chicago two years ago, and the loss of this large sum had crippled him so badly that he had resorted to these forgeries in order to recoup his depleted finances. When a bill of lading was due others were issued to take them up, and in this way Mr. Harroun says he was enabled to continue this practice for several months.

On September 10 the Chicago Board ordered all the deals of the Harroun Commission Co. closed.

After the disclosure Mr. Harroun expressed a willingness to turn over every dollar's worth of property he had, real and personal, for the benefit of those who may suffer loss by reason of his transactions. His assets consist principally of a large elevator in Elwood, Kan., just across the river from St. Joseph, and another in Kansas City. There are interests in other cities, too, but they are said to be inconsequential.

It is believed that the Harroun Elevator Company's liabilities will exceed its assets by several hundred thousand dollars, the total of the forgeries amounting, it is estimated, to nearly half a million dollars.

CHICAGO AT ST. LOUIS.

A large delegation from the Chicago Board of Trade is expected to attend the ceremonies of Chicago Day, Saturday, October 8, at the Louisiana Purchase Exposition, St. Louis.

President Jackson has appointed the following committee to make arrangements for a Board of Trade special: W. S. Booth, chairman; James E. Bennett, W. D. Denniston, Fred Paddleford, Joseph P. Griffin.

A special train will carry the delegates over the Chicago & Alton road on October 6, returning October 9.

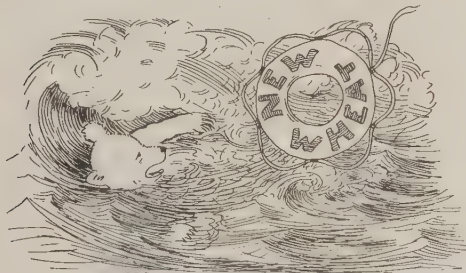
The latest railroad yard nuisance is the wholesale thefts of grain doors at Peoria, the Burlington road alone having lost over 800 within the past few months.

THE GRAIN BUSINESS IN BROOKLYN.

There is a general feeling among shipping people here, says the Brooklyn Eagle, that the bottom has been about reached and that there will shortly be a revival in business. The fact that grain rates and elevator charges to this port have been reduced is hoped by many to lead to some shipments of grain from here. At present, a real revival of the grain trade would do more for the water front section than any other class of business. With its disappearance vanished, too, the tramp steamship. Each grain steamer left here from \$3,500 upward, distributed in labor, coal, oil, chandlery, machine and boiler shops, to say nothing of the butcher and the baker. Many of the elevators have been dismantled or razed completely, but there are still large facilities for business if it offers. Of the big fleet of expensive floating elevators not more than four or five have been in commission for the past year, the rest being laid up for lack of work, even on the transatlantic liners needing grain for stiffening. The gradual development of water ballast tanks and appliances has also tended to diminish the demand for export grain from this port, as the prices here have been too high for the European market.

RECENT HISTORY OF THE BEAR.

Mr. Bear had a tough time in the wheat pit during August, and Zahm & Co.'s cartoonist tells all about it in his weekly pictures, as follows:



Will the life preserver (new wheat) save the bear?

It hasn't helped him much as yet.—July 30.



That life preserver (new wheat) didn't help the bear any.

"He's almost a 'goner.'"

Will he be "saved" or will he sink?—August 6.



"Rust."—Mr. Bear surely knows what "rust" is by this time.

May wheat touched 1.08½ here this week.—August 13.



Mr. Bear badly licked. He's about out of funds and ammunition. Will the bulls "sink him" next week? Rust, rust, nothing but rust.—August 20.



The bear got some of it back again this week.—August 27.

GERMAN CO-OPERATIVE GRAIN HOUSES.

According to a paper laid before a meeting of the chief representatives of the corn trade in Berlin recently, the pet institution of the agriculturists—the "Kornhaus," or co-operative grain depot—is not a success. There are in existence 34 of these associations, numbering 7,330 members, to which the government has advanced the sum of 5 million marks (\$1,190,000). The total quantity of corn warehoused in one year was 121,461 tons, or about 3,918 tons for each establishment. A big merchant often disposes of a quantity equal to this in one transaction. The total storage capacity is 48,133 tons, or about 1,533 for each warehouse, so that they are not filled twice in one twelve-month. The turnover is not sufficiently frequent, therefore it is evident to any practical man that such a concern must be worked at a loss, and if left to their own resources they would all collapse.

At the meeting mentioned above the assembled grain merchants accepted a resolution insisting upon the unfairness of any pecuniary subventions being granted to these institutions, which were no longer co-operative associations pure and simple, but rather commercial enterprises competing in the market, and therefore threatening the very existence of many existing firms in this line of business. The protest has been sent in to the Ministry of Commerce, but owing to the powerful influence of the agrarian political party, its success is very problematical.

L. G. Graff & Son, grain receivers at Philadelphia, on September 6 completed arrangements for the receipt of the first consignment of Kaffir corn ever shipped to that market. The corn will be used experimentally, and if any demand arises for it in the city, orders will be placed for further shipments.

FACTS AND FIGURES

It was demonstrated by the crop this season that winter wheat does better in the Willamette Valley than spring.

Chicago's first spring wheat arrivals, new crop, were two cars on August 16. One graded No. 3 spring and the other No. 1 northern.

Toledo makes a change in carload lots. Hereafter, when grain is sold by carloads, without the specific quantity being named at the time of sale, a carload of wheat, corn or rye shall consist of 1,000 bushels each, and a carload of oats 1,500 bushels.

The committee on transportation of the New York Product Exchange has obtained concessions from the combination which controls the floating elevators in New York harbor, which will result in lowering the cost of handling export grain through New York.

High prices for wheat have been attracting Pacific Coast grain eastward, and during August at least 500,000 bushels came across the Rockies in spite of a rate of 33 cents per bushel to Chicago. This kind of wheat is particularly sought for by the breakfast food millers.

Baltimore during August made quite liberal coastwise shipments of Maryland and Virginia wheat to New York for local mill consumption. This movement is quite unusual, and the spread between the two markets was enough to make the trade quite profitable.

While the prison jute factory at Walla Walla is running at fully capacity on grain sacks at 5.85 cents, against 6.75 asked by dealers in foreign sacks, the San Quentin, Cal., penitentiary people were offering (August 27) their surplus at 4.75 f. o. b. San Francisco.

Adam K. Derr of Tulpehocken, Pa., owns a grain bag said to have been made of flax fibre in Germany in 1744 and to have been in constant use since that date by the family. Of course, at one time it was used for wheat by Washington's soldiers at Valley Forge.

Syl Dixon, the Oklahoma boomer, proposes to start his wheat train eastward from Enid on October 3. But Dixon, who has been talking of the train for weeks, has already been "scooped" by the Brinson-Waggoner Grain Co. on the wheat train idea, as reported in these columns a month ago.

It is estimated that Texas millers will need 12,000,000 bushels of Oklahoma wheat this grinding season. The Texas crop is now estimated by railroad men at only 8,000,000 bushels. At any rate, the local wheat is leaving the farms very slowly if it is there in quantity.

One case of shortage at Kansas City, Kan., was explained August 19, when it appeared that four boys (one white) at Leavenworth whittled a hole in the side of a Maple Leaf car, and after taking out a few bushels on their own account went away, leaving the hole open. The car leaked at this hole all the way to Kansas City. The white boy was dismissed, but the negroes were ordered to leave town or be sent to the city jail for six months.

WHEAT RECEIPTS AT PRIMARY MARKETS.

The wheat receipts at eight primary markets, during the 10 weeks' ending September 5, for the last two years, according to the Cincinnati Price Current, were as follows:

	1904-5.	1903-4.
St. Louis.....	7,293,000	6,247,000
Toledo.....	1,571,000	2,502,000
Detroit.....	441,000	324,000
Kansas City.....	12,203,000	8,381,000
Winter wheat.....	21,438,000	17,454,000
Chicago.....	6,645,000	5,332,000
Milwaukee.....	857,000	864,000
Minneapolis.....	8,440,000	9,118,000
Duluth.....	2,379,000	1,329,000
Spring wheat.....	18,321,000	16,543,000
Aggregate, 10 weeks.....	39,759,000	33,997,000



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., SEPTEMBER 15, 1904.

Official Paper of the Illinois Grain Dealers' Association.

ABOUT HAY.

Rummaging not long ago in a bound volume of one of the old heavy English "Quarterlies," the writer ran across a "before-the-war" review, wherein the author proved that all the then mighty fuss being made about "Cotton is King" was wholly misplaced, since the American crop of hay was even then (1859 or 1860) more valuable than that of cotton; yet few knew it. So, too, at this moment, the commercial world halts in trepidation as the crop-killer mutilates the wheat yield, and there is none to ask, "But what of hay?" And yet the hay crop is worth more than the wheat, being second only to corn in value—last year's crop worth no less than 556 millions of dollars. How many people knew this, or that hay brings in one-fifth the agricultural revenue of the nation?

It is this general ignorance of the nature and value of the hay crop that has enabled the carriers to raise the classification on hay and straw and so add at least \$1 a ton to the cost of marketing this product without an outcry of protest on the part of the public. Suppose the classification of wheat, corn or oats were so arbitrarily raised, and that when the case was reported to the Commerce Commission, by whom the new classification was declared unjust, and the carriers snapped their fingers in derision and wholly ignored that decision, what would not the public say! But hay—"Oh, don't bother about hay!"

The classification treatment of hay and what that has cost the public in money over and above what the Commerce Commission has said is a reasonable charge for its transportation would be enough of itself to force Congress to give the Commission power to enforce its own decision—if the public realized the unfairness the

hay men complain of and which they would realize if it were applied to corn or oats. But hay—no one knows about it.

FARMERS' ELEVATOR GRAIN SHIPMENTS.

Certain Chicago receivers on September 10 met behind closed doors and after a warm session announced their purpose to receive shipments and to buy grain from farmers' elevators or anybody else who has grain to sell. This action was in the nature of a protest against the attempt on the part of country dealers to shut shipments by unfair competitors out of the Chicago markets by refusing to patronize receivers who handle that class of stuff.

There are two classes of competitors of grain buyers in the country who are known as regular dealers—scoopers and coöperative elevators. These latter have an undoubted legal right to do business. But they may be unfair competitors when (1), as in the case of scoopers, they do not keep an open office the year around, but jump in when the rush of grain is on, pay more than the market price for grain when it is necessary to get it, and eventually end by beating either the farmer or the receiver, or both; and (2) when the coöperative elevator binds its stockholders by the penalty rule to trade only with the company—a system that good lawyers have held to be illegal, being a restraint upon trade and the law of free competition. As these methods are universally recognized as piratical, it is only fair that country shippers should demand that beneficiaries of the regular trade's business should cut these other people out; and all receivers who are fair will do so on receiving proper notice.

But a "scooper" who is in business every day in the year, although he may not operate an elevator, because, perhaps, the amount of business does not warrant the investment, and a farmers' elevator company that does business on business principles, are not per se unfair competitors; and it is hard to see on what principle regular dealers can ask receivers to refuse to handle their shipments or to bid them for grain; nor is it fair to ask receivers who do protect regular dealers from pirates in general to turn them down—more especially when a few houses in all markets who don't care a cuss word about "regular," as distinguished from "irregular," dealers are energetically going after that business and are getting it and creating more of it.

PROPOSED CORN EXHIBIT.

The first fruits of the report of the grain improvement committee of the Grain Dealers' National Association is the directors' movement, noted elsewhere, to carry out the Association's instructions to hold a corn exhibit and school of instruction in corn culture in connection with the annual Fat Stock Show at Chicago in November. At this writing the success of the exhibit is in a measure dependent on the favorable recommendation of the Board of Trade directors to its members, which will no doubt be forthcoming, as will also the comparatively small amount of money needed to conduct the enterprise.

The importance of this movement will not be questioned. In spite of the educational work of

agricultural press and experiment stations the task of elevating the grade and increasing the yield of grain per acre proceeds slowly. The bucolic mind is more or less sluggish; it takes hold of new and perhaps radical ideas slowly, and only after infinite repetition; and so it is found that American grain consumption is rapidly overtaking production. With our immense acreage this should not be so; and it is only because of our imperfect agricultural methods as a whole that it is so.

The proposed corn exhibit will not, of course, revolutionize corn culture; but it would be a step toward a betterment of methods which would be longer than many others, because its work would reach a larger body of practically interested farmers than probably any other event held in this country.

RECIPROCAL DEMURRAGE.

One of the most interesting symposiums the "Communicated" department has contained for a long time is found there in this issue on the topic, reciprocal demurrage. One striking feature of the discussion is the conservative attitude of the trade on this most important problem; for while with but two or three exceptions all are agreed that "turn about is fair play," yet the majority are agreed also that the settlement of the question should be by agreement with the railways rather than by legislation.

Several of the correspondents do not believe in the popular doctrine that the railroads should pay when they are unable to furnish cars, although this is the real nub of the controversy. And they are sustained in their view by the Supreme Court of Nebraska, in a decision reported in brief in the department of "Court Decisions," which holds that the roads cannot be required to deliver cars they cannot deliver, and therefore cannot be held in damages for neglect. Roads, the court says, are expected to furnish facilities for handling only an average amount of tonnage at a given moment, not any amount that may be offered.

And this is, of course, a plausible ruling; it appeals to the reason. The unfortunate circumstance that modifies its entire fairness is the fact (for which the courts and shippers are not responsible) that the roads, when cars are scarce and business is booming, do discriminate between patrons and do furnish cars only for the higher classes of freight or for long hauls and neglect the rest of the traffic; as in the case of Indiana, for example, where the roads of that state send cars to the Northwest for long-haul interstate traffic in flour, say, while the local business is ignored or abandoned so long as the more profitable traffic is obtainable. If the courts, while excusing the roads from doing the impossible, would suggest a way to punish them for an unfairness they might correct, the problem might be solved right there.

A problem with which there is less difficulty in establishing the equities is the question of payment for loss by delays in transit. These are often serious. The roads are, of course, liable for the damage under the law of common carriers; the trouble is to collect the damages. It is, indeed, to escape part of these damages that the roads have devised the uniform bill of lading with which they mean to make shippers

waive their rights or pay an exorbitant increase in the rate for "insurance." There is nothing reciprocal about paying for losses caused by delays; and since there is little analogy between such losses and that caused by delay in unloading cars, the reciprocal act on the part of the roads would consist in paying damages promptly and without requiring shippers to get judgments therefor in a court of law.

So while "reciprocal demurrage" seems the fairest of propositions, and is so, yet the practical settlement of the details is not so simple a matter. That a reciprocal arrangement will be arrived at ultimately admits of no doubt, since the temper of the shipping public demands it; the problem is to arrive at a settlement that shall be at once universal in its application and yet be of such a character as to compensate shippers without disturbing commerce or inflicting unfair burdens on the carriers.

RECOGNIZING CO-OPERATIVE COMPANIES.

The matter of recognizing coöperative elevator companies is not treated in the same way by all the state associations. Some refuse to recognize them as regular, whether they do business regularly or irregularly; others recognize as regular those which do not enforce the penalty feature; and still fewer associations welcome as members even those whom they recognize as regular dealers.

Were an expression of opinion allowable here, it would be that when, as has been done, a wholly voluntary application for membership by a coöperative company, that had wished to be friendly and to coöperate with regular dealers, has been rejected on the general principle of incompatibility, a mistake has been made. It is better to have a competitor in the association than out of it; and if dealers imagine they can seriously hurt the feelings or the business of the coöperatives which are getting plenty of grain and are earning (as some are in the Northwest) dividends of 10 to 40 per cent, by refusing them the privileges of membership which they urge their other competitors to accept, it is safe to say they will be disappointed.

The regular trade, where it is necessary now to do so, will not make a serious mistake in changing tactics on this problem. Remembering that all dealers, regular or piratical, have legal rights, and that all who do business squarely ought to have association rights also, many friends of regular dealers believe the quickest way to mitigating the evil of piratical coöperative companies is by recognizing and coöperating in trade with all those who do a square business.

A NEW SCHEME.

The latest proposition of the Eastern trunk lines, which the newspaper say has been submitted to the Western roads, is to make all freight from the West destined to the East pay local rates to Chicago, St. Louis and Peoria, and from there local rates to all points East. This would destroy all the through rate arrangements in effect for years between the West and the East, and vice versa. It is gravely argued that the scheme would abolish certain costly rating

offices at Chicago and save \$50,000 a year of expense, and that it would also relieve the grain of inspection and weighing charges at the gateways named. Incidentally, too, it would squeeze more blood out of a trade that is getting to be rather anæmic now.

MORE TROUBLE.

While, as remarked a month ago, many of the Northwestern coöperative grain companies, thanks to a steady and advancing market, made some money during the crop season of 1903-04, yet not all have done so. As Sir Arthur Helps once said, "Even the gods are powerless to help the stupid."

At Bath, Minn., the farmers are in trouble—have been losing money and owe their commission merchant, with \$1,700 in checks and \$2,200 in storage receipts still out unpaid and unprovided for. It is claimed the agent of the company lost the money in option speculation; and as he was acting without bond and wholly on his own responsibility, the farmers are quite indignant, though pained, to think they as stockholders may have to "make good."

The Steele County Farmers' Elevator Company, Minnesota, is in debt about \$4,000 with no corresponding assets, excepting an action at law against their agent (or his bondsmen), who was allowed to run the business to suit himself.

At Owatonna, too, the farmers are in trouble, the stockholders' committee of the company reporting on August 13 "liabilities too large to continue the business." Later the hat was passed, and a note for \$2,000 was given by individuals to be used as capital to continue through the current crop season. This company also turned its "manager" loose; and in consequence checks neither signed by the manager nor endorsed by anyone as payee were found among those honored by the company's paymaster. The reorganized company will do business in the future only with "honest people"—the Farmers' Exchange outfit at Minneapolis.

When one considers how small in the aggregate have been the profits of the successful coöperative companies operating in the Northwest, the whole coöperative business there would be absurd were not the farmers apparently so desperately in earnest about it. They will be cured only when the crash comes, as no doubt it will, on a serious and continued break in the market, or a season of tough wheat, which is always graded too high by a complaisant manager, who will naturally favor his own people, and all the meager profits of the past years will be wiped out by the losses of a single short season.

UNIFORM BILL OF LADING.

The Chicago Board of Trade's transportation committee has indorsed and supports the position of the American Shippers' Association, which, in a circular letter dated August 10, recommends:

1. That shippers refuse to sign the uniform bill of lading.
2. That shippers insist that the words "not negotiable" be stricken out from all "order" bills of lading.
3. That shippers use their present bills of lading and shipping receipts.

As noted in these columns a month ago, the railroads have receded in part from the arbitrary position taken by them prior to July; but it is their intention, as they now announce, to

use the uniform bill tentatively on and after October 1, 1904, until January 1, 1905, during which time "carriers may use or accept bills of lading and shipping order forms such as are now in ordinary use;" but after January 1 the uniform bill only will be used.

In the interval the grain trade, which is, more than most shippers, interested in the defeat of this effort of the carriers to revolutionize the trade methods and customs, should continue to support the movement to prevent the actual promulgation of the new bill on January 1 next, and also try to bring about an adjustment of the differences by agreement.

The roads claim that they are forced to this form of bill of lading by the rapid increase of claims against them, many of which are fraudulent. If this be true, a bill of lading that will protect both carriers and shippers can be made. At any rate, the proposed bill is grossly unfair in that the general public, which is honest, would by it be made to suffer because some shippers, undoubtedly only a fraction of the whole number, are dishonest.

THAT INJUNCTION.

The Illinois Railroad and Warehouse Commissioners are industriously circulating by means of the country newspapers the impression that, as the Bloomington Pantagraph puts it—

The St. Louis board [Merchants' Exchange] wishes to control things on both sides of the river, but the Illinois board blocked their game effectually through the courts.

One might think the St. Louis Merchants' Exchange was bent on doing something quite dreadful, indeed; and this seems to be the impression the Commissioners desire to convey to the public, and which no doubt some well-meaning but uninformed people have acquired.

But when one stops to remember that the game the Illinois Commissioners have so "effectually blocked" is merely a system inaugurated by the St. Louis Merchants' Exchange to insure that grain shippers to that market, on both sides of the river, shall get credit for every pound of grain they send there—to protect shippers against the possible dishonesty and almost certain carelessness and the inevitable mistakes of weighers—one fails to see the peculiar virtue of "blocking effectually" a most laudable "game" that has already greatly benefited grain shippers of all kinds to St. Louis during its short career, and this, too, in spite of the stubborn interference of the Illinois Commissioners at every stage of the "game" to prevent shippers to East St. Louis from getting the benefit of that protection which is accorded in St. Louis and which all grain markets of respectable character now guarantee their patrons.

If the Commissioners are entitled to any special credit or praise for this sort of service, they are quite welcome to it. Common people not interested deeply in peanut politics need a diagram, however, to see the benefit "blocking the game" can be to the grain shipping public of Illinois.

A shrewd and experienced grain man in Michigan concludes a letter to this office by saying: "The party who is bent on doing all the business usually comes out bankrupt."

EDITORIAL MENTION

It seems to be a toss-up between Jones and Statistician Hyde for "first money."

The newspapers are discussing the question, Can America make the world's wheat price? Watch her with this season's crop.

The fall meeting of the Grain Dealers' Union will be held at the Hotel Johnson, Red Oak, Iowa, on Tuesday, September 20, at 2 o'clock p. m. There are several important questions to be discussed, and a full attendance is desired.

The system of refusing to accept consignments of grain from farmers' elevators seems to have at least two visible results: It throws all of that business into the hands of a very few receivers; or else it has a tendency to create a co-operative receiving agency, such as the Minnesota Farmers' Exchange is trying to create at Minneapolis. Both results are undesirable.

The National Hay Association's annual book, giving proceedings of the St. Louis convention in full, constitution and by-laws, official grades and list of members to date, is the handsomest annual the Association has ever issued. It is equally valuable for reference, and is notable as being entirely without advertisements, save of the Association Cipher Code.

Superior, Wis., has at last come to her senses in the matter of taxation of grain in store on April 1 of each year. Having discovered that the assessment of grain resulted in the withdrawal of business from that terminal, the taxing board is now asked not to assess such property. It is pretty difficult to repeat a "hold up" in the same place and in the same old way.

There are so many wildcat insurance companies operating throughout the country that dealers needing more insurance than can be had of the mutuals should buy it only of agents they know to be reliable and to be handling business for reliable companies only. Don't try to get "cheap" insurance by "mail order" or of itinerant solicitors; gold bricks are always more expensive than they seem to be when purchased.

Elevator owners are by this time pretty well acquainted with the methods of risk inspection in vogue with the mutual companies—so different from the usual kid glove inspection of special agents; and they are glad to welcome the mutuals' inspectors who examine a risk from basement to cupola, seeing everything in the plant. It is probably true, as has been said, that certain careful owners, who are aiming to keep their risks in the highest possible physical condition of safety, would insure with the mutuals if only to get their inspection of plants; for by no other inspection can an owner arrive at a more intelligent knowl-

edge of his elevator's actual condition as a fire risk.

Rust or no rust in the Northwest, there's no "rust" around the Chicago Board of Trade, where business has been simply "booming" in every line, with everybody happy again.

A novel electrical rat-killing apparatus was some time ago reported from Rochester, N. Y., where an elevator owner placed a bait of cheese on a copper plate so arranged that the rat which ate the cheese would close a circuit, resulting in its electrocution. Now the insurance men say that as such contrivance can be easily short circuited it constitutes a serious hazard and will sooner or later be barred by the underwriters.

Still another "test case" to secure a decision on the Nebraska elevator site (Ramsey) law has been begun at Lincoln. No less than three such cases have been begun from time to time, but for various reasons none have ever gone beyond the præcipe stage, having been dismissed before trial or argument. As a rule the nominal defense of the railroads has been that "there are elevators enough"; but they in the end yield and grant sites for more.

The Agricultural Department has undertaken to gather annually statistics in regard to the rice area under cultivation, the probable yield, weather conditions, and the insect pests or diseases which will have their effect on the yield. Mr. Delancy Evans of Washington is now working on the first report of this kind ever to be issued. The Southern rice crop has become large and valuable enough to make such statistics indispensable to the rice trade.

The kind of grain inspection the Agricultural Department has been making at Texas gateways to guard against the exit of insect pests from that state in grain will commend itself, because the government has available experts in that line of work especially qualified to prevent the spreading of plant diseases. The states which buy Texas grain are therefore satisfied their interests will be fully protected by the system in vogue and trade is not interrupted.

Here, east of the Rockies, the miller seems to be invading the territory of the grain dealer, especially in the Northwest and Southwest where the struggle for wheat by millers and exporters is sharpest; but the West Coast Trade of Tacoma says that on that coast the "tendency is that of the grain trade to monopolize the manufacture of flour. One of several illustrations of this is seen in the transfer of the 300-barrel flouring mill of the Lewiston Milling Company to the Vollmer-Clearwater Company of Lewiston, Idaho. This company, which is probably the largest buyer of grain in the Clearwater country, has, within the last year or so, secured control of most of the mills in the country, including the large mill at Kendrick. Nearly all the big grain dealers at Tacoma and other terminal markets are also interested in the milling of wheat, and the signs indicate that the time will come when every bushel of wheat

raised in the Northwest will be ground into flour and be exported as such. From this vantage point there is nothing to fear from the merger of the grain and flour business."

No wonder the bucket-shop is hard to kill, considering its enormous profits. In a New York concern, a small shareholder, a woman, with only 518 shares, swore she drew out in dividends over \$41,000 in five years. John Hill Jr. may chase leaks of quotations into these places until age overtakes him, but the shop will go on until the government takes a hand and puts it in the same class with lotteries and other frauds the postoffice inspectors have on their list.

The South Dakota elevator law requires that every elevator that accepts grain for storage must give bond in the sum of \$2,000 for each 10,000 bushels of capacity; must publish its rates for storage, which must be approved by the Railroad Commissioners and which may not be increased during the year and be made a part of all warehouse receipts and tickets. These are not unfair regulations, perhaps, but why anyone would want to store grain under such conditions doesn't appear to an onlooker.

Having adjusted inspection differences between Chicago and Buffalo, head of the lakes shippers are now informed that Buffalo receivers are looking askance at Minnesota wheat inspection and this season will refuse to take grain on Minnesota certificate of grade only, but will demand sample. The Buffalos don't want to repeat last year's experience—especially the experience of the latter end of the season, when almost anything was graded No. 1 Northern.

The many failures of Chicago cargoes of contract grain to inspect contract at Buffalo led to a visit by one of the Warehouse Commissioners to Buffalo recently. He found, what he might have found without going to Buffalo, that this condition of things was embarrassing, but he seems to have gotten mixed up as to who were most embarrassed. The Commissioner suspected it was the Chicago shipper only, and probably he was affected; but how about the Buffalo or foreigner receiver? However, we are told that "a conference was held between the inspectors of the two ports and an amicable conclusion reached;" and that, "It is believed there will be no further cause for complaint." And "sweet peace" reigns supreme.

It was reported on 'change some days before the September crop report appeared that Russia had offered a New York house a large quantity of wheat—200,000 bushels at 95½ cents c. i. f. New York, subject to the duty of 25 cents per bushel. The Russians were thought to have gotten the notion that there was a famine here, which was a singularly good guess—for a Russian, considered in the after-light of Statistician Hyde's guess as to conditions. Later, but still before the crop report appeared, it was stated by a Chicago paper that "Argentine wheat is to come to Chicago to fill May sales." This is all very interesting, especially as it gives unexpected significance to

the 25-cent tariff, which hitherto has done duty merely as a "guaranty of good faith" by tariff lawmakers. It looks like "solemn earnest" now, however.

The practice among boys of stealing grain from cars in railroad yards seems either to be increasing or to be more generally reported than it used to be. And taking the country over, the number of youths engaged in this form of petty crime is appalling. In Peoria of late the arresting of boys seems in no wise to seriously decrease the nuisance, and the aim of the authorities and the Board of Trade is now to capture and punish receivers of the stolen grain. Perhaps this is wise, but the corrective punishment of the boys should not be overlooked.

In the greater interest of the presidential struggle this year grain dealers in Illinois should not neglect to pledge candidates for the legislature to vote for the civil service reform bill that will appear at Springfield next winter; nor those of Indiana to vote for the railway commission bill. These are business matters that are really of greater individual importance to the trade in these states than the election of a president, since they affect business directly. The gubernatorial candidates favor these bills in both states; what is needed is sufficient votes in both houses to make the bills laws.

The old struggle between the receivers and millers at Minneapolis to increase the contract grades of wheat is on again. The receivers want to deliver No. 2 Northern with a 5-cent difference. Naturally the milling interests oppose any change of the rule, because they think the stuff is graded sufficiently low as it is. However, the proposed plan is for both interests to agree upon a No. 2 Northern grade that shall be sound milling wheat and good enough to be actually worth only about 2 cents a bushel less than No. 1 Northern, in which case no advantage would be gained by the elevators in delivering at 5 cents penalty except in case of a corner or of manipulation of the market. Any plan to head off illegitimate manipulation ought to receive respectful attention.

A Nebraska farmer complains that at his station all the elevators pay the same price, and there is no competition and he must take what he can get or haul his grain back to the farm. Very likely. But the farmer who is no fool knows that the fact that there is no difference in price and "no competition" is not evidence that he is not offered all the grain is worth at his station. He may not be getting his due sometimes at some stations, but the absence of "competition" is not evidence of the fact. In truth, there can in the very nature of things be very little, if any, "competition" for grain at a given station, since the value of the grain at the terminal is known, and the freight also is known, as is very closely the actual cost of handling it. The only margin for difference in amount offered for grain is a guess at the probable shrinkage in transit and the amount of loss by missing grade, and the risk the dealer will take in bidding. All intelligent farmers under-

stand these things; and, by the way, grain dealers who are disposed to play hog ought to remember that they do. A fair adjustment of margins to the reasonable chances of the business by honest buyers will result almost invariably in a condition of "no competition" for obvious reasons, and that condition will be satisfactory to a large majority of farmers. When it passes beyond a condition of fairness to the farmer, sooner or later there will be friction and ultimately substantial trouble for hog-gish dealers.

The trial of Jacob Eppinger at San Francisco, on a charge of criminality in connection with the grain business conducted under various company names by Eppinger, Ettlinger & Co., resulted after several weeks of legal struggle in a disagreement of the jury, so that a new trial will be necessary within a very short time. The history of this remarkable firm, once the greatest in the grain trade on the Pacific Coast, is a record at once of proud achievement and the meanest swindling and robbery. Jacob Eppinger's defense was that his age and illness forced him to commit the details of the business to Ettlinger, who, after the failure, a year or more ago, disappeared and has not since been located. Yet it seems hardly credible that a partner should not have known that the business, involving millions, was being run practically without books, and that it was running deeper and deeper into debt, to say nothing of the fact that the grossest irregularities with warehouse receipts and manipulation of weights were being systematically conducted. It is probable no "nastier" failure ever occurred in the grain trade than the one named, however Mr. Eppinger may or may not be responsible therefor—not even excepting the later one of the Harrouns, just reported from St. Joseph.

In response to a request from the National Business League for an expression regarding the presidential term of office, the directors of the Chicago Board of Trade went on record by the adoption of the following:

Resolved, That if the presidential term of office were limited to a single one of six years it would materially lessen the burdens of business which frequently recurring elections now inflict, and would also greatly enhance the efficiency of the executive and legislative branches of the government by removing the temptation to secure a reelection of a president at the expense of needed legislation.

The resolution embodies the views, certainly, of a large number of people, especially business men, who hate to bother with politics; yet even if the resolution were embodied in the fundamental law of the land, it would probably fail of the expected benefits to the nation, unless the business world should do what it does not now do—take an active interest in politics in a non-partisan way, with the sole purpose of forcing a better administration of public affairs. It is not the law of the land that is at fault, nor even the multiplicity of elections, but the indifference of the public to the administration and the presence of graft (countenanced and abetted even by the "better classes," so-called), as well as the fearfully demoralizing influence of unpunished and unpunishable commercial crime, with which our financial and commer-

cial world is now thoroughly permeated. We need to clean our house—not to alter or burn it.

Milwaukee and Minneapolis have been exchanging complimentary remarks anent their respective positions as barley markets. Mr. Goetz, who recently removed from the Cream City to Minneapolis, unfortunately said in substance that the scepter was departing from Milwaukee, a statement the Milwaukee people resented. Yet it must be true; for as only a few years ago the center of this trade was removed by the natural trend of production from Buffalo and Ontario ports to Milwaukee, so in turn that city must yield to one further west. It is inevitable. Milwaukee may still get the grain in the form of malt and the beers may continue to make Milwaukee as famous as ever, but as New York has ceased to be a great malting state, so malting now must gradually move westward. It is to be noted, however, that for the time being the largest malting premises in the country have just been finished in the Calumet district of Chicago.

A World's Fair literary enthusiast says: "There is no corn in all the world that can compare with the American corn;" which is probably true, but not necessarily, in a commercial sense, for foreigners do say that American corn, after it has suffered the limits of sophistication along the route from the farmer's crib to the steamer's hold, is sometimes pretty poor stuff; and that's no fable. But the same writer's dictum, that, "It is the export corn that is going to be the greatest source of revenue to the country," is not so apparent. Not much money is made exporting corn compared with using it at home. Abroad it can be sold at a price only that is lower than the Argentine and Eastern Europe are willing to accept for their products. Fortunately the home consumption is growing very rapidly, so that the writer's last statement is, of course, true that, "A good corn-producing farm is better than the richest gold mine. The gold mine will come to an end, but a good corn farm will last through eternity."

Mr. G. W. Shepard of Milwaukee, commenting on Judge Chytrous' decision in the "July oats corner case," suggests that there are always two sides to a corner, as to everything else, and asks—

Is the cause of a corner the buying up of all the marketable cash property, thus forcing fictitious prices, or has it not always been the justifiable effort on the part of speculators who believed the legitimate situation warranted advancing values, to protect their holdings from the unwarranted onslaughts and overselling by that class of speculators who never own any actual grain, and never want to, but think they see this opportunity to unnaturally depress prices and force the liquidation of those who are compelled to pay cash for all the grain that can be delivered to them? Does not this character of selling depress values to an unwarranted degree?

Of course, market manipulations are nuisances to the regular business of handling grain, but Mr. Shepard is certainly right in saying that if speculators would stop selling what they don't own they would never be caught in a squeeze.

TRADE NOTES

George M. Moulton, head of the firm of George M. Moulton & Co., grain elevator builders and contractors of Chicago, was elected at San Francisco, Cal., on September 8, Grand Master of the Knights Templar of America.

A huge postal card calls attention to the fact that the Foos Gas Engine Co. of Springfield, Ohio, have a 40-page catalogue which will be sent free to prospective purchasers. The Foos Engines range in size from two to eighty horsepower and are carried in stock for immediate delivery.

The World's Fair exhibit of the Olds Gasoline Engine Works, Lansing, Mich., is located at Block 34, Palace of Machinery. The display includes engines from two to fifty horsepower, arranged in order by sizes. Special types are also shown, some of them in operation. Visitors are cordially invited to call and inspect the exhibit.

The Automatic Scale Company, Ltd., succeeds Williams Bros. & Snyder of Minden, La., manufacturers of the Williams Automatic Bagging and Weighing Machine. The company has an attractive exhibit at Section 121, Agricultural Building, World's Fair, St. Louis. The new corporation is a strong one and the factory is being worked to its full capacity.

The Jeffrey Mfg. Co. of Columbus, Ohio, has issued a special booklet devoted to Jeffrey Grab Buckets. This is the most powerful device of its kind on the market and is intended for use on ore, mine-run coal, broken limestone, gravel, sand and other heavy materials. The Jeffrey company has special catalogues devoted to grain elevating and conveying machinery which will be mailed free of charge upon request.

One of the attractive advertising novelties of the season is a Russian leather combination notebook and card case, sent out by the Kay-Pim Manufacturing Co. of St. Louis, Mo. This firm has completed its new buildings at North Broadway and Monroe streets, and has added a large number of up-to-date machines and tools for turning out grain elevator work, power transmission machinery, etc., of all descriptions, so that no delay occurs in filling their orders.

The September issue of "Graphite," published by the Joseph Dixon Crucible Co. of Jersey City, N. J., is a special number and contains instructive and seasonable talks on the preservation of metal surfaces with Dixon's Silica-Graphite Paint. Paint specifiers and users in every country of the world will be interested in the excellent illustrations in halftone of notable steel structures and the information on good paint and good painting. A copy of the paper will be sent free to any of our readers who make application direct to the company.

W. C. Barbeau and family of London, England, are enjoying a vacation in this country and will visit the St. Louis Exposition before returning. Mr. Barbeau is manager of the London branch of the S. Howes Co., Silver Creek, N. Y., and through his office the entire European, African and Oriental business of the firm is conducted. Mr. Barbeau reports that, aside from the war disturbance, which has temporarily curtailed sales in the Russian empire, business is exceptionally good and prospects for the future are all that could be desired.

The Missouri Pacific Railroad has just purchased a large Hess Pneumatic Grain Drier and Cooler to be installed at its new elevator in Kansas City, for the use of the Hall-Baker Grain Co. This is the fourth machine of this kind placed in use in Kansas City, giving that point extensive facilities for the drying of damp and immature grain. The demand for kiln-dried corn has increased to such an extent in the past two years as to make it a regular article of commerce, and has been such that leading grain operators have found it profit-

able to equip themselves with facilities for producing such corn.

It is announced that the Camp Grain Grain Co. has let the contract for its factory building at Metamora, Ill.

The Northern Grain Co., operating several elevators at Manitowoc, Wis., have ordered a No. 5 Hess Pneumatic Grain Drier and Cooler, to be erected without delay. This is the second machine purchased by the company, the first one having been in operation the past six years at another elevator operated by them in the same city. The prospect of an immature corn crop and the growing demand for kiln-dried corn, regardless of seasons, have led the company to greatly increase their drying facilities.

The Stephens-Adamson Mfg. Co. of Aurora are very busy at their shops and report the following new contracts: Machinery for the new drier plant being built for the Missouri Pacific Railway at Kansas City, Mo. John S. Metcalf & Co. are engineers and it will be completed about October 1. Machinery for the new elevator of Maxim & Russell at South Paris, Maine. Machinery for the 1,000,000-bushel elevator for the Canadian Pacific Railway at Ft. William, Ont. Barnett & Record Co. are the contractors and it will be completed about December 1. They have just furnished the complete equip-

The B. S. Constant Co. of Bloomington, Ill., received an order this month from the Indiana Machine & Supply Co. of Indianapolis, Ind., for five of their Patent Chain Ear-Corn Conveyors, using 1,060 feet of track and 2,120 feet of their Special B. S. C. Chain, which are to be installed for the National Elevator Co., which is making improvements at five of their elevators. The longest of these conveyors will be 320 feet.

COON BROS., CHENEYVILLE, ILL.

As reported last month, Coon Bros., with headquarters at Rantoul, Ill., purchased through C. A. Burks of Decatur the elevator formerly owned by Risser & Rollins at Cheneyville, and also the lumber business of the same firm.

The elevator property is shown in the accompanying picture—a 40,000-bushel elevator, located on land leased of the L. E. & W. R. R., with ear corn cribs holding 20,000 bushels and oats storage for 25,000 bushels. The elevator has three stands of elevator legs, four shelled corn dumps and six ear corn dumps; also, Victor Sheller, Barnard & Leas Cleaner, Ideal Loader and 30-horsepower gasoline engine, with rope transmission of power.

The office is a detached building, 20x30 feet in size, with Howe Platform Scales.



ELEVATOR AND CORN CRIBS OF COON BROS., CHENEYVILLE, ILLINOIS.

ment of machinery, steel elevator legs, etc., for the Minnesota Linseed Oil Co. at Minneapolis, Minn., built by the Barnett & Record Co. They have furnished the machinery for the new elevator built by the Macdonald Engineering Co. for Lytle & Stoppenbach at Jefferson Junction, Wis., and have the contract for the machinery for the new elevator being built for Bokhoff & Graham Bros. at Durand, Ill., for which the Burrell Engineering & Construction Co. were the engineers.

H. L. Day of Minneapolis, patentee and manufacturer of Day's Dust Collecting System, has received orders for dust collecting systems and equipment from the following parties within the past few days: Joseph Schlitz Brewing Co., for its Milwaukee plant; Lahart Elevator on C., M. & St. P. Ry. tracks, Minneapolis, Minn.; Big Four R. R. Elevator at Cincinnati; St. Louis & Iron Mountain Ry., in their elevator at Little Rock, Ark., to be operated by T. H. Bunch, and additions to system recently installed in Hubbard & Palmer's Elevator at Kasota, Minn.

We have seen a report of the returns of the first seven carloads weighed out of the Holzman-Burnett Grain Co.'s house on Richardson scales. The total shrinkage on 389,360 pounds of corn and oats was only 270 pounds, 38.6 pounds per carload, or about 1-16 of 1 per cent. This remarkable report is conclusive evidence of the accuracy and reliability of the Richardson. Regarding this scale a leading miller says: "We have operated a Richardson Automatic Scale for over ten years. It is not only exact, but has never been out of order or cost us one cent for repairs since its purchase."

Cheneyville handles from an average crop from 500,000 to 600,000 bushels of grain per season, divided among two elevators.

THE INTERNATIONAL GRAIN EXPOSITION.

In pursuance to the resolution adopted by the National Grain Dealers' Association in June, President Schneider appointed the following committee to make arrangements for holding a corn exhibition in connection with the Chicago Fat Stock Exposition, to be held in Chicago on November 23 to December 3: George A. Wells, Des Moines, Iowa, chairman; Prof. P. G. Holden, Ames, Iowa, superintendent; J. J. Quinn, Minneapolis, Minn.; Prof. W. M. Hayes, St. Anthony Park, Minn.; George Beyer, Decatur, Ill.; Frank Funk, Bloomington, Ill.; Wm. Nash, Chicago; Jos. P. Griffin, Chicago.

The committee met in Chicago on September 5, and has asked the board of directors of the Chicago Board of Trade to request the Board to endorse the holding of the exhibition.

The object of the exhibition is to stimulate the best efforts of the farmers and producers to increase the yields and improve the quality of the grain products of the country, and special consideration will be given to the educational features of the exhibition by providing suitable exhibits of grain together with lectures on corn breeding, corn judging and allied subjects.

The exhibition is designed to be general in its character and include the different sections of the several grain-producing states.

VISIBLE SUPPLY OF GRAIN.

The following table shows the visible supply of grain Saturday, Sept. 10, 1904, as compiled by George F. Stone, secretary of the Chicago Board of Trade:

In Store at	Wheat, bu.	Corn, bu.	Oats, bu.	Rye, bu.	Barley, bu.
Baltimore.....	1,156,000	61,000	283,000	9,000	
Boston.....	152,000	42,000	58,000		
Buffalo.....	503,000	335,000	352,000	161,000	134,000
Chicago.....	1,781,000	1,317,000	2,597,000	615,000	42,000
do. afloat.....					
Detroit.....	151,000	24,000	37,000	33,000	
do. afloat.....					
Duluth.....	519,000		295,000	90,000	386,000
do. afloat.....					
Ft. William.....	36,000				
do. afloat.....					
Galveston.....	185,000				
do. afloat.....					
Indianapolis.....	234,000	112,000	57,000	1,000	
Kansas City.....	1,953,000	165,000	187,000		
Milwaukee.....	71,000	48,000	439,000	12,000	153,000
do. afloat.....					
Minneapolis.....	1,922,000	8,000	1,297,000	56,000	225,000
Montreal.....	42,000	6,000	55,000		2,000
New Orleans.....					
do. afloat.....					
New York.....	812,000	246,000	797,000	155,000	155,000
do. afloat.....	32,000	17,000	43,000		
Peoria.....	1,000	13,000	1,557,000	5,000	9,000
Philadelphia.....	246,000	11,000	261,000		
Port Arthur.....	80,000				
do. afloat.....					
St. Louis.....	2,454,000	115,000	1,032,000	4,000	11,000
do. afloat.....					
do. afloat.....	335,000	147,000	1,738,000	6,000	1,000
Toronto.....	25,000		5,000		
On Canal.....	64,000	284,000	340,000	9,000	
On Lakes.....	326,000	1,690,000	58,000	35,000	80,000
On Miss. River.....					
Grand total.....	13,115,000	4,701,000	11,834,000	1,194,000	1,179,000
Corresponding date 1903.....	14,166,000	6,925,000	7,492,000	709,000	1,532,000
Weekly Inc.....	301,000	767,000	2,328,000	232,000	271,000
Weekly Dec.....					

FLAXSEED AT CHICAGO.

The receipts and shipments of flaxseed at Chicago during the 13 months ending with Aug., as reported by Chas. F. Lias, flaxseed inspector of the Board of Trade, were as follows:

Months.	Receipts.		Shipments.	
	1904-05.	1903-04.	1904-05.	1903-04.
August.....	277,990	345,236	200,620	97,809
September.....		102,630		162,900
October.....		530,960		166,049
November.....		708,953		44,057
December.....		250,979		78,274
January.....		307,976		90,906
February.....		212,736		60,784
March.....		418,554		42,694
April.....		60,100		22,326
May.....		90,100		34,079
June.....		453,467		15,055
July.....		165,769		45,931
Total bushels.....	277,990	3,640,340	200,620	866,544

RANGE OF PRICES AT CHICAGO.

The daily range of prices for cash grain at Chicago for the month ending Sept. 12 has been as follows:

Aug.	NO. 2. * R. W. WHT.		NO. 1. NO. * SP. WHT.		NO. 2 CORN.		STR. OATS.		NO. 2 RYE.		NO. N. W. FLAXSEED.	
	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.	Low.	High.
12.....	1.02 1/2	1.05 1/2	1.10	1.15	54 1/2	54 3/4	35 1/2	35 1/2	71	71		
13.....	1.01 1/2	1.03 1/2	1.10	1.15	53 1/2	53 3/4	35	35	70	71		
14.....												
15.....	1.02 1/2	1.03 1/2	1.10	1.15	54 1/2	54 3/4	34 1/2	35 1/2	71	71		
16.....	1.04 1/2	1.06 1/2	1.15	1.18	54 1/2	54 3/4	35 1/2	35 1/2	72	72		
17.....	1.07 1/2	1.09 1/2	1.15	1.18	54 1/2	54 3/4	35 1/2	35 1/2	74	74		
18.....	1.09	1.09	1.15	1.18	54 1/2	54 3/4	35 1/2	35 1/2	74	74		
19.....	1.09 1/2	1.11 1/2	1.15	1.18	53 1/2	53 3/4	35 1/2	35 1/2	75	75		
20.....	1.10	1.12 1/2	1.15	1.18	54 1/2	54 3/4	35 1/2	35 1/2	76	76		
21.....												
22.....	1.09 1/2	1.11 1/2	1.15	1.18	54 1/2	54 3/4	35	35	75 1/2	75 1/2	1.25	1.25
23.....	1.09	1.09 1/2	1.15	1.18	54 1/2	54 3/4	34 1/2	35	74	74		
24.....	1.04 1/2	1.09 1/2	1.20	1.20	54 1/2	54 3/4	34 1/2	35	74	74		
25.....	1.07	1.08 1/2	1.18	1.18	53 1/2	53 3/4	34	34 1/2	74	74		
26.....	1.05	1.07 1/2	1.20	1.20	53 1/2	53 3/4	33 1/2	34 1/2	73 1/2	73 1/2	1.25 1/2	1.25 1/2
27.....	1.08 1/2	1.07 1/2	1.18	1.18	52 1/2	52 3/4	33	33	72 1/2	72 1/2	1.25	1.25
28.....												
29.....	1.07 1/2	1.09 1/2	1.16	1.16	53 1/2	53 3/4	33 1/2	33 1/2	73	73 1/2	1.25	1.25
30.....	1.07 1/2	1.09 1/2	1.16	1.16	53 1/2	53 3/4	33 1/2	33 1/2	73	73 1/2	1.25	1.25
31.....	1.07 1/2	1.09 1/2	1.16	1.16	53 1/2	53 3/4	33 1/2	33 1/2	73	73 1/2	1.25	1.25
Sept. 1.....	1.08 1/2	1.09 1/2	1.16	1.16	54 1/2	54 3/4	33 1/2	33 1/2	73 1/2	73 1/2	1.25 1/2	1.25 1/2
2.....	1.08 1/2	1.10	1.16	1.16	53 1/2	53 3/4	33 1/2	33 1/2	73 1/2	73 1/2	1.26	1.26
3.....	1.07 1/2	1.08 1/2	1.16	1.16	53 1/2	53 3/4	32 1/2	33 1/2	72 1/2	72 1/2	1.26	1.26
4.....												
5.....												
6.....	1.03 1/2	1.06 1/2	1.16	1.18	53 1/2	53 3/4	32 1/2	32 1/2	70	70	1.26 1/2	1.26 1/2
7.....	1.06 1/2	1.07 1/2	1.16	1.18	54 1/2	54 3/4	32 1/2	32 1/2	70 1/2	70 1/2	1.26 1/2	1.26 1/2
8.....	1.07 1/2	1.09 1/2	1.16	1.18	54 1/2	54 3/4	32 1/2	32 1/2	72 1/2	72 1/2	1.26 1/2	1.26 1/2
9.....	1.08 1/2	1.09 1/2	1.16	1.16	53 1/2	53 3/4	32 1/2	33	72 1/2	72 1/2	1.27 1/2	1.27 1/2
10.....												
11.....												
12.....												

*Holiday.

During the week ending August 19, Prime Contract Timothy Seed sold at \$2.90 per cental; Prime Contract Clover Seed at \$11.50@11.75.

During the week ending August 26, Prime Contract Timothy Seed sold at \$2.80@2.85 per cental; Prime Contract Clover Seed at \$11.50@12.50.

During the week ending September 2, Prime Con-

tract Timothy Seed sold at \$2.90@3.00; Prime Contract Clover Seed at \$12.25@12.50.

During the week ending September 9, Prime Contract Timothy Seed sold at \$2.90@3.00; Prime Contract Clover Seed at \$11.75@12.35.

RECEIPTS AND SHIPMENTS.

Following are the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of August, 1904:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1904	1903	1904.	1903.
Wheat, bushels.....	1,044,795	1,102,087	40,040	830,882
Corn, bushels.....	108,199	312,947	101,240	275,257
Oats, bushels.....	357,128	257,449	1,961	59
Barley, bushels.....	2,112			
Rye, bushels.....	13,279	20,115		
Timothy Seed, lbs.....	8,230	5,787	717	
Clover Seed, lbs.....	610	767		
Hay, tons.....	2,919	2,687	1,046	1,270
Flour, bbls.....	149,078	358,443	46,801	213,363

BOSTON—Reported by Elwyn G. Preston, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1904	1903	1904.	1903.
Flour, bbls.....	133,635	141,544	41,767	48,562
Wheat, bushels.....	266,370	49,302	117,744	149,673
Corn, bushels.....	215,167	133,788	306,348	182,465
Oats, bushels.....	590,391	616,732	1,200	4,270
Rye, bushels.....	1,976	714		
Barley, bushels.....	1,000	260		
Flax Seed, bushels.....				
Mill Feed, tons.....	1,162	858	64	307
Cornmeal, bbls.....	4,097	1,440	1,258	2,321
Oatmeal, bbls.....	7,302	6,334	7,010	531
Oatmeal, sacks.....	7,042	5,194	5,880	10,260
Hay, tons.....	5,930	8,390	696	306

BUFFALO—Reported by F. Howard Mason, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1904	1903	1904.	1903.
Wheat, bushels.....	2,798,079	1,330,003		
Corn, bushels.....	5,336,896	3,404,747	1,494,000	930,000
Oats, bushels.....	370,700	2,510,728	4,554,000	3,291,400
Barley, bushels.....	315,175	130,844	290,000	3,336,000
Rye, bushels.....	40,000	188,000	46,000	29,000
Timothy Seed, lbs.....			26,000	342,500
Clover Seed, lbs.....				
Other Grass Seed, lbs.....	13,138	22,250		
Flax Seed, bushels.....	687,000	555,600		
Broom Corn, lbs.....				
Hay, tons.....				
Flour, bbls.....	868,700	994,008		

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1904	1903	1904.	1903.
Wheat, bushels.....	5,119,468	3,552,799	1,836,337	1,218,087
Corn, bushels.....	7,253,300	6,004,747	8,258,743	7,388,202
Oats, bushels.....	11,700,136	8,331,885	4,612,789	5,452,939
Barley, bushels.....	495,050	450,225	120,600	39,130
Rye, bushels.....	246,340	179,550	47,398	34,796
Timothy Seed, lbs.....	2,031,985	4,736,312	2,180,519	4,346,872
Clover Seed, lbs.....	125,885	124,555	79,155	274,425
Other Grass Seed, lbs.....	624,669	272,387	3,119,844	1,069,574
Flax Seed, bushels.....	275,395	369,780	200,620	83,420
Broom Corn, lbs.....	1,025,143	882,310	608,438	470,005
Hay, tons.....	60,784	17,307	1,010	1,275
Flour, bbls.....	517,105	555,922	387,280	385,441

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1904	1903	1904.	1903.
Wheat, bushels.....	253,248	155,804	170,599	222,126
Corn, bushels.....	649,372	511,734	416,314	266,810
Oats, bushels.....	884,163	412,805	573,292	203,110
Barley, bushels.....	2,000	1,695	1,000	90
Rye, bushels.....	32,443	35,627	1,636	14,295
Timothy Seed, bags.....	7,181	7,492	1,830	3,842
Clover Seed, bags.....	332	622	256	362
Other Grass Seed, bags.....	6,770	5,827	5,227	5,566
Flax Seed, bushels.....				
Broom Corn, lbs.....				
Hay, tons.....	6,039	8,294	2,223	3,431
Flour, bbls.....	120,475	111,019	82,243	69,128

CLEVELAND—Reported by F. A. Scott, secretary of the Chamber of Commerce.

Wheat, bushels.....	102,614	293,185	20,204	49,65
Corn, bushels.....	387,552	454,088	332,655	386,39
Oats, bushels.....	2,387,769	1,072,147	595,810	159,75
Barley, bushels.....		765		
Other Cereals.....	3,294		33,007	83
Flaxseed, bushels.....				
Hay, tons.....	3,807	5,623	1,073	64
Flour, bbls.....	4,574	6,892	2,384	2,26

ELEVATOR AND GRAIN NEWS

ILLINOIS.

The Farmers' Elevator at Graymont, Ill., is completed.

Titus Bros. are erecting a new elevator at Steward, Ill.

The Rogers Grain Co. is building a new office at Sibley, Ill.

B. M. Stoddard's new elevator at Minonk, Ill., is in operation.

Morrison & Grindley's new elevator at Royal, Ill., is now in operation.

James W. Young has bought Zach Deck's elevator at Bismarck, Ill.

The National Elevator Co. has bought an elevator at Longview, Ill.

Bartlett, Frazier & Carrington are building an elevator at Danville, Ill.

A. Scilne and O. Olson have leased and will operate the elevator at Appleton, Ill.

A Mr. Parker has purchased and will operate the grain elevator at Yates City, Ill.

A 22,000-bushel elevator is being built at Thomas, Ill., for Bartlett, Frazier & Carrington.

Mansfield & Co.'s new 50,000-bushel grain elevator at Stonington, Ill., is in operation.

J. A. Simpson has ordered three improved Hall Distributors for his elevator at Minonk, Ill.

Snell & Ponting have succeeded Walker & Snell in the grain and hay business at Moweaqua, Ill.

Bokhoff & Graham Bros. are rebuilding their elevator at Durand, Ill., which was burned on July 26.

The Farmers' Elevator Co. of Peruville, Ill., has purchased a site on which to erect its elevator.

Horace Bradley and C. B. Gorham have engaged in the grain and live stock business at West Chicago, Ill.

Alexander O'Kane has purchased the grain elevator at Hazelhurst, Ill., taking possession September 12.

The Munday-Settlemyre Grain Co. of Litchfield, Ill., has bought Thees Heien's elevator at Farmersville, Ill.

The Cerro Gordo Grain and Coal Co. of Cerro Gordo, Ill., has increased its capital stock from \$10,000 to \$15,000.

E. W. Fyler has sold his lease to the elevator at Dakota, Ill., to Graham Bros., who will continue the grain business.

A farmers' company recently organized at Ferris, Ill., has bought F. M. Cutler's grain elevator and will operate it.

Wyeth & Hardin have built a 25,000-bushel addition to their elevator at Fair Grange, Ill., for the storage of ear corn.

Root & Westervelt have sold their grain elevator at Westervelt, Ill., to Charles Donnel and W. S. Middlesworth for \$7,000.

It is reported that John McGee of Hamilton, Ill., contemplates engaging in the grain and live stock business at Warsaw, Ill.

The Indianapolis Elevator Co.'s house at Filson, Ill., is about completed. George L. Pfeifer will have charge as manager.

The Fred Cloldt Co. of Beecher, Ill., has equipped its elevator with an improved Hall Distributor and a Hall Non-chokable Boot.

The stockholders of the Savoy Grain and Coal Co., Savoy, Ill., have voted to increase the capital stock from \$5,000 to \$12,000.

The Campus Grain Co. is building a 2,000-bushel addition to the elevator at Campus, Ill., recently purchased from Maguire Bros.

James L. Smith is building a 75,000-bushel grain elevator at Dawson, Ill. He is also erecting a brick grain office and bank building.

Harris & Doyle are erecting a 70,000-bushel corn crib near their Vandalia Elevator at Arcola, Ill. The crib will be 208x27 feet in size and 26 feet high.

The Cropsey Elevator Co., a farmer's organization, of Cropsey, Ill., has been incorporated with a capital of \$5,000, to deal in grain, fuel and lumber.

The Collison Grain Co. of Collison, Ill., has incorporated with a capital stock of \$6,000. T. F. Collison, J. A. King and F. L. Endicott are the incorporators.

The Champlain Farmers' Grain Co., composed of farmers in the vicinity of Fairbury, Ill., has been granted a charter. The capital stock is \$4,200. The company has bought the elevator on the Wa-

bash Railway at Champlain Switch, from the Rogers Grain Co.

The Buxton Mill and Grain Co. has been incorporated at Buxton, Ill., with a capital of \$10,000. August and H. C. Beckmeyer and E. C. Hogan are the incorporators.

With the completion of the elevators being built at Homer, Ill., by J. H. Parish and J. M. Current, that town will have an elevator storage for grain of 140,000 bushels.

The Russell Grain Co., Mt. Auburn, Ill., has filed articles of incorporation; capital of \$10,000. The incorporators are N. W. Hacker, John A. Niles and Frederick Ullmann.

The Hull Elevator Co. has been incorporated at Hull, Ill. The capital stock is \$8,000 and the incorporators are: J. W. Sherry, S. M. Dickerson and W. F. Chamberlain.

At a meeting of the Whiteside County Farmers' Exchange, held at Montmorency, it was decided to build a 10,000-bushel elevator. It will probably be erected in Sterling, Ill.

The Munday-Settlemyre Grain Co. of Litchfield, Ill., has purchased an automobile to be used as a means of conveyance between its seven elevators in the surrounding towns.

William Murray states that he will rebuild his elevator at Ludlow, Ill., recently purchased from Stone & Taylor. He has also bought E. D. Risser's lumber yard at that place.

The McClure Grain Co. has been granted a charter at Mt. Auburn, Ill., with a capital of \$15,000. N. W. Hacker, J. A. Niles and Frederick Ullmann are the incorporators.

John Rankin & Co., grain dealers at Chicago, Ill., have incorporated with a capital stock of \$2,500. The incorporators are Isabella B. and Jessie H. Rankin and John L. Pearson.

Bartlett, Frazier & Carrington have sold their elevator at Weedman, Ill., to the Weedman Farmers' Grain and Coal Co. The consideration was \$3,000, possession being given at once.

August Funsinn is reported to have sold his elevators at Culton and Dimmick, Ill., to Bartlett, Frazier & Carrington of Chicago. Mr. Funsinn will continue to operate his elevator at Fitchmore, Ill.

Two new elevators will be built at Wing, Ill., this fall, one by E. T. Holloway and the other by George Gibb & Son. The old ones are now being torn down and will be replaced by modern structures.

The Windsor Grain Co. has been chartered at Windsor, Ill., to deal in grain, coal and lumber. The capital stock is \$6,000 and the incorporators are: S. A. Walker, M. P. Carroll and W. H. Wittenauer.

An 80,000-bushel corn crib is being built adjoining L. O. Bodman's elevator at Chesterville, Ill. It will be 300 feet long, 27 feet wide and 28 feet high. A 20-horsepower gasoline engine has been installed in the elevator.

The Chapin Grain Co. has been incorporated at Chapin, Ill., with a capital stock of \$5,000, to deal in grain and live stock. C. S. French, T. R. Biggers and C. E. Darake are the incorporators. An elevator will be built.

The Illinois Valley Grain Co. has been chartered at Ottawa, Ill., with a capital stock of \$33,000. The incorporators are: Joseph N. Dunaway, Henry J. Ruckrigel and John L. Barnard. The new company succeeds to the grain business of Dunaway, Ruckrigel & Co.

At the annual meeting of the R. F. Cummings Grain Co., held at Clifton, Ill., the following officers were re-elected for the ensuing year: President, R. F. Cummings; treasurer, William Nash; secretary, W. H. Vansant. The affairs of the company are reported in a prosperous condition.

The recently incorporated Farmers' Elevator Co. of Ocuya, Ill., capitalized at \$10,000, has bought the elevator and cribs at that place owned by Kirkpatrick, Lackland & Co. of Chenoa, Ill. Possession was given September 1, the consideration being \$13,500. The elevator is a new one, having been completed only a short time ago, and is situated on the C. & A. right-of-way.

Marion C. Davenport, formerly of Springfield and Decatur, Ill., and I. C. Felger, a grain dealer of Bement, Ill., have bought F. D. Gillespie's elevator at Harris, Ill., and taken possession. This elevator is one of the best on the Big Four between Champaign and Peoria. Mr. Davenport will have charge of the house as manager. The deal was made through C. A. Burks, the elevator broker of Decatur, Ill.

The Union Elevator and Annex at Sixteenth Street and the south branch of the Chicago River has been leased by the trustee for the bondholders of the Chicago Railway Terminal Elevator Co. to the Harris-Scotten Co. for one year at a rental of \$20,000, with an agreement for a longer period. The elevator, which has a capacity of 2,000,000

bushels, has been operated under a lease by Bryant & Co., but this lease has been terminated.

B. A. Neal and J. J. Stevenson of Birmingham, Ala., have bought S. J. Miller's elevator, hay barn and residence property at Millersville, Ill. The consideration was \$10,000. The new owners took possession at once. Mr. Miller has removed to Bloomington, Ill.

EASTERN.

L. A. Drown of Brownington, Pa., has bought a one-half interest in a grain and flour store at Woodsville, N. H.

Josiah Cope & Co. have installed some new elevating machinery in their grain and flour warehouse at Oxford, Pa.

The safe in the office of William Kelly's elevator at Lewiston, N. Y., was blown open by burglars on the night of August 28.

A company is being organized to erect a grain elevator at Indiana, Pa. A sidetrack from the B. R. & P. Ry. will be laid to the site.

Josiah Place has sold his grain business and feed mill at Dighton, Mass., to Charles H. Smith, possession being given September 1.

A conveyor has been installed in Miller Bros. & Co.'s elevator at Bergen, N. Y., to carry grain from the new annex to the bins in the old portion of the house.

Abraham Harris, Edward M. Gans and Joseph R. Taylor of Norwalk, Conn., have incorporated under the style of Harris & Gans, to deal in grain, hay and fuel.

The Atlantic Alcohol Co. of Cambridge, Mass., has been incorporated under the laws of Delaware, with a capital stock of \$625,000, to buy and sell grain and distill liquors.

A company recently organized to do a grain and milling business at Nichewaug and Petersham, Mass., will locate stores for the sale of its product at Athol and other near-by towns in Worcester County, Massachusetts. The shipping point is to be North Dana.

McDowell & Sons have purchased a site for the erection of an elevator and cornmeal mill at Washington, D. C. The plans for the new plant provide for a building 80x88 feet, and three stories in height, of brick with slate roof. The main building will have a frontage of 57 feet and the annex 30 feet. The plant will cost about \$16,000, exclusive of the machinery.

The Pennsylvania Warehouse and Safe Deposit Co. has let the contract for the rebuilding of its warehouse and grain elevator at Philadelphia, Pa., which were burned about a year ago. The warehouse will be 75x104 feet in size and six stories high, of brick and steel construction. The elevator will be 75x53 feet in size and 96 feet high. The exterior will be of steel construction, covered with corrugated galvanized iron, and the interior will be finished in pine.

SOUTHERN AND SOUTHWESTERN.

An addition is being built to the Bunch Elevator at Little Rock, Ark.

The Peckham Grain Co. of Peckham, Okla., has been incorporated with a capital of \$3,000.

A. H. Teeter has succeeded the firm of Ferguson & Teeter in the grain trade at Cleburne, Texas.

The Farmers' Co-operative Shipping Co., Dakota, Okla., has been incorporated with a capital of \$5,000.

A. Waller & Co., grain and seed dealers at Henderson, Ky., have leased a tract of land in that city and will erect corn cribs.

Thad Harrison, a grain dealer of Myra, Texas, has filed a petition in bankruptcy. His assets are estimated at \$22,689 and his liabilities at \$20,340.

The Wabash Grain Co. has been chartered at Uniontown, Ky., with a capital of \$10,000. G. J. Harris, J. W. Pfeffer and F. Rathman are the incorporators.

It is announced that the Nashville Warehouse and Elevator Co. of Nashville, Tenn., proposes doubling its present grain storage capacity of about 200,000 bushels.

The Barstow Grain Co. of Barstow, Texas, has been chartered with a capital of \$5,000. George E. Briggs, Edward Miller and James Miller are the incorporators.

The Farmers' Federation of Woodward County is the style of a new cooperative concern, chartered with a capital of \$5,000, which will build an elevator at Quinlan, Okla.

The Brackett-Wallace Mill and Grain Co. is rebuilding its grain elevator and corn mill at Sherman, Texas, which were burned August 11. The new buildings will be erected largely of steel and

will cost, it is stated, \$20,000 more than those burned.

The Farmers' Grain Co. of Fort Cobb, Okla., has been chartered with capital stock of \$5,000.

The Cashion-Lockridge Grain Co., capitalized at \$10,000, has been granted a charter at Cashion, Okla. The incorporators are G. C. Marriott, W. B. Pettit and H. A. Reynolds.

The Illinois Central Elevator at New Orleans, La., was taken over on September 1 by the Harris-Scotten Co., which operates elevators at Chicago, Kansas City and Gainesville, Texas.

The Home Grain Co. of Minneapolis, Minn., and Wheeling, W. Va., has incorporated under the laws of Oklahoma, with a capital stock of \$150,000. The incorporators are: Gustave E. Ewe, Herbert N. Chadbourne, Walter J. Hartzell, Frank M. Mann and Charles M. Harrington, all of Minneapolis. Kent Barber of Enid, Okla., is territorial agent.

OHIO, INDIANA AND MICHIGAN.

Adam Bright will erect a large grain elevator at Addison, Ohio.

The Bettsville Grain Co. of Bettsville, Ohio, has been dissolved.

C. O. Clark and George Mumma will operate the elevator at Kimmell, Ind.

Thomas Wilson & Co. are building a 25,000-bushel elevator at Marlette, Mich.

C. M. Root & Co. of Newark, Ohio, are reported to have sold their grain business.

John H. Cove has succeeded Cove & Dick in the grain trade at Nashville, Mich.

H. Curtland has withdrawn from the grain firm of H. Curtland & Co. at Defiance, Ohio.

The Toledo Elevator Co.'s new elevator at Shelbyville, Ind., is reported completed.

R. B. Cougill is succeeded in the grain trade at Mt. Victory, Ohio, by Cougill & Morrow.

Thomas & Bergen have succeeded the firm of Thomas & Son in the grain and produce business at Lowell, Mich.

The Lake Odessa Elevator Co.'s new 40,000-bushel elevator at Lake Odessa, Mich., is completed and in operation.

George Engler, flour and grain dealer at Cincinnati, Ohio, has made an assignment; assets, \$4,750; liabilities, \$4,000.

The La Rue Grain and Elevator Co. has built a large fuel house near its elevator at La Rue, Ohio, and will handle coal.

The Croswell Milling Co. of Croswell, Mich., has postponed building its proposed elevator at Amadore, Mich., until next year.

The Charles A. Kraus Grain Co. of Milwaukee, Wis., is said to be negotiating for the establishment of an elevator at Hammond, Ind.

New seed cleaning and other machinery has been installed in Cline & Nelson's elevator at Mansfield, Ohio, and the old equipment overhauled.

N. A. Grabill Co. of Daleville, Ind., are installing three of Constant's Patent Chain Feeders and Conveyors in J. F. Pearson's elevator at Battle Ground, Ind.

Thomas Langen of Springfield, Ohio, and T. W. Brooks have engaged in the grain business at Enon, Ohio, under the firm name of Langen & Brooks.

It is reported that the Isaac Harter Milling Co. of Fostoria, Ohio, has leased 1,000,000 bushels of its elevator capacity to a Chicago firm for the storage of oats.

V. L. Anderson has sold his interest in the elevator at Oxford, Ind., to R. G. Risser of Kankakee, Ill. Mr. Anderson will remain in charge of the business until next spring.

The Interstate Grain Co. of Cincinnati, Ohio, has incorporated with a capital stock of \$25,000. W. S. Todd, C. S. Einrick, J. C. Fullerton, A. F. Brownhall and J. O. Davis are the incorporators.

George Crawford has purchased the interest of his partner, M. Kent, in the elevator at Mendon, Mich., and will continue the business alone. Mr. Crawford now owns and operates two elevators.

A company with a capital stock of \$50,000 is being promoted at Canton, Ohio, by the Canton Business Men's Association for the purpose of building an elevator and engaging in the grain trade.

The Kalida Grain and Lumber Co. of Kalida, Ohio, has filed articles of incorporation with a capital stock of \$25,000. J. D. Watterson, I. F. Stauffer, O. C. Parker, J. E. Roose and L. G. Lee are the incorporators.

The new South Bend Grain Co. has purchased W. H. Barker's elevator on the Lake Shore tracks at South Bend, Ind., and taken possession. I. H. Scoffern, late of Valparaiso, Ind., has charge as manager. The stockholders of the South Bend

Grain Co. are also interested in other grain companies, one of which is the Pears-East Grain Co. of Buchanan, Mich.

WESTERN.

The Vollmer-Clearwater Grain Co. is constructing a grain tramway across the Clearwater River at Basalt, Idaho.

James Muir has taken over the McAllister Warehouse at Wilbur, Wash., and is also erecting one at Wilsons Creek, Wash.

It is estimated that the wheat belt of the Palouse country in Washington will yield about 10,000,000 bushels of wheat this year.

The Farmers' Grain and Supply Co. of Wilbur, Wash., is building an addition, 50x50 feet, to its warehouse, increasing the capacity to 60,000 bushels.

The Farmers' Warehouse Co. of Garfield, Wash., has sold its warehouse to Kerr, Gifford & Co. of Portland, Ore. O. F. Rogers of Athena, Ore., will be manager.

W. E. McAllister's warehouse on Front Street, Butte, Mont., was broken into by burglars recently. They carried away 1,000 sacks and a quantity of oats.

The Montana Elevator Co. has been organized at Lewiston, Mont., and is erecting an elevator at Moore, Mont., a new town about 20 miles distant. The company will handle grain and hay.

The Farmers' Grain Co. of Spokane, Wash., is building a warehouse at Washtunna, Wash. It will be 50x250 feet in size and cost \$4,000. The machinery will be operated by a gasoline engine.

Yegen Bros. (Incorporated), importers and jobbers of Billings, Mont., write that they are considering the erection of a grain elevator at that place with a capacity of 50,000 to 75,000 bushels.

C. E. Wood, the miller and grain dealer of Genesee and Nez Perce, Idaho, has formed a partnership with W. C. Cochran & Son of Moscow, Idaho. They have bought the Tacoma Grain Co.'s grain and hay business at Moscow, Joel and Troy, Idaho, leasing the warehouses owned by that concern.

In the recent award of army forage contracts for the Department of the Columbia, the Albers Bros. Milling Co. of Portland, Ore., was given the contract for supplying straw and bran for Vancouver Barracks, Wash., and bran for Fort Lawton, Wash. The W. W. Robinson Co. of Seattle, Wash., was awarded the hay and oats contract for Vancouver Barracks and Fort Flagler, Wash. A number of other grain and forage contracts for various posts were apportioned among several dealers.

IOWA.

B. Sargeant has repaired and reopened his elevator at Hudson, Iowa.

Droll Bros. succeed W. H. Droll in the grain business at Hills, Iowa.

W. H. Eaton's elevator at Emerson, Iowa, is completed and in operation.

The repairs to the Neola Elevator Co.'s elevators at Persia, Iowa, are completed.

Heis & Son of Armstrong, Iowa, will engage in the grain business at Gridley, Iowa.

The D. Rothschild Grain Co.'s elevator at Minden, Iowa, has been opened for the season.

F. R. Dalby has succeeded J. N. Coppock in the grain and lumber business at Woodburn, Iowa.

The Western Flour Milling Co. is erecting a grain elevator in Davenport, Iowa, at a cost of \$6,400.

The Farmers' Elevator Co. of Lanyon, Iowa, has opened its elevator with Aaron Peterson as buyer.

The A. E. Harris Co. has succeeded the firm of Harris & Peterson in the grain trade at Marne, Iowa.

F. H. Wallace has succeeded the firm of Dickerson & Wallace in the grain trade at Melbourne, Iowa.

The Western Elevator Co.'s new 25,000-bushel elevator at Burt, Iowa, is completed and receiving grain.

J. McCool and J. F. Wiley have leased an elevator at Dow City, Iowa, and engaged in the grain business.

The Farmers' Co-operative Society of Burchinal, Iowa, has bought the Iowa Elevator Co.'s elevator at that place.

The Jackson Elevator Co. has completed its elevator in the new town of Swisher, Iowa, on the Eastern Iowa Interurban Railway.

The line of 23 elevators on the M. & St. L. Railway in Northern Iowa, owned by the Iowa-Minnesota Cereal Co., are all open for business. The company also owns elevators in Southern Minnesota on the C., M. & St. P. Railway. Hon. Tom Way, Governor Cummins and State Treasurer Gil-

bertson of Iowa are leading stockholders in the Iowa-Minnesota Cereal Co.

The Western Grain Co. has taken possession of the Simpson & Cousin Elevator at Alden, Iowa, and opened it for business. William Miller is in charge.

The Hunting Elevator at Pearl City, Iowa, which had been closed for some months, has been overhauled and opened for business. J. P. Barnum will be in charge.

The new 15,000-bushel elevator at Cartersville, Iowa, built by the Younglove & Boggess Co. for the Cartersville Supply Co., is reported finished and ready for business.

Larkin & Thompson of Madison, S. D., have purchased the 15,000-bushel elevator on the I. C. Railway at Rock Rapids, Iowa, formerly owned by Arp & Rohek. The consideration was \$2,800.

A. B. Jaquith's new elevator at Council Bluffs, Iowa, on which work has just been commenced, will be 138x100 feet in dimensions and 160 feet high. There will be car sheds on both sides of the main building. The power house will be located a short distance from the elevator. Spur tracks from both the Great Western and Rock Island railways will be built to furnish shipping facilities. Seeley, Son & Co. of Fremont, Neb., have the contract for building the new plant and C. R. De La Matyr will be superintendent of construction.

MINNESOTA AND WISCONSIN.

The new Farmers' Elevator at Wendell, Minn., is finished.

G. W. Knox is building a 10,000-bushel elevator at Aitkin, Minn.

The Duluth Elevator Co. has closed its house at Donnelly, Minn.

A new elevator is in course of construction at Fraseville, Minn.

The new elevator at Philbrook, Minn., is finished and in operation.

The Imperial Elevator Co. is building an elevator at Altona, Minn.

A. D. Beaudeau will build an independent elevator at De Graff, Minn.

J. E. Dennis & Co. of Downing, Wis., will erect an elevator at that place.

Sonder & Cullman's new elevator at West Salem, Wis., is reported completed.

An elevator may be built at Nelson, Minn., by the Inter-State Elevator Co.

An addition is being built to the Inter-State Elevator at Holloway, Minn.

Ole Carlson's new elevator at Maynard, Minn., is nearly ready to receive grain.

The Rothsay Elevator Co. has completed its new elevator at Stockwood, Minn.

Westerdahl Bros. new metal-clad grain elevator at Hersey, Wis., is completed.

Charles M. Hill's elevator at Grey Eagle, Minn., has been opened for business.

The Prairie Elevator Co.'s new elevator at Richville, Minn., is about finished.

The Hubbard & Palmer Co.'s new elevator at Madelia, Minn., is about completed.

The Sidnam Elevator at Monticello, Minn., is now open with W. E. Crozier as buyer.

G. H. Krundick has installed a new gasoline engine in his elevator at Winona, Minn.

J. E. Stowell has sold the Independent Elevator at Buffalo, Minn., to Thomas Gribbon.

Laird Bros. have bought M. Burk's grain and implement business at Chatfield, Minn.

E. A. Brown of Luverne, Minn., will not open his elevator at Pipestone, Minn., this year.

M. N. Tisdale has installed grain cleaning machinery in his elevator at Slayton, Minn.

Construction work on W. E. Pegg & Co.'s elevator at Marietta, Minn., is in progress.

The National Elevator Co. of Minneapolis is building an elevator at Wheatville, Minn.

The Guthrie Elevator on the Milwaukee road, at Austin, Minn., is now open for the season.

The R. E. Jones Elevator Co. has succeeded the Thompson Elevator Co. at Hastings, Minn.

The Plato Milling Co. of Plato, Minn., is said to have bought an elevator at Browntown, Minn.

The Columbia Elevator Co. has been making some repairs to its elevator at Renville, Minn.

The Nye-Schneider-Fowler Co.'s new 25,000-bushel elevator at Kiester, Minn., is completed.

The Farmers' Grain Co. has been incorporated at Superior, Wis., with a capital stock of \$50,000.

The Milwaukee Chamber of Commerce has ratified, under suspension of rules, the action of the directors making the St. Paul Elevator A at Mil-

waukee regular for the year ending August 5, 1905.

F. M. Davies & Co., grain dealers of Minneapolis, Minn., have incorporated under the same style.

One new elevator at Dent, Minn., is about completed and the erection of another is talked of.

The farmers' organization at Barry, Minn., has bought the Gillette Elevator and will operate it.

The new elevator at Almora, Minn., is ready for business. William Shaw will have charge as buyer.

The Simmons Milling Co. has been making some improvements to its elevators at Red Wing, Minn.

The Farmers' Elevator Co. of Hoffman, Minn., capitalized at \$10,000, has been granted a charter.

The Davenport Elevator at Trosky, Minn., is now open for business, with Henry Heiden as manager.

The new Farmers' Elevator at Elko, Minn., will be ready for operation the latter part of September.

T. S. Chittenden & Co. have completed a new grain and potato warehouse at Green Lake Station, Wis.

A number of improvements have been made at the Western Elevator Co.'s house at Ellendale, Minn.

The Eagle Roller Mill Co. of New Ulm, Minn., has bought the Independent Elevator at Fairfax, Minn.

The Farmers' and Merchants' Elevator Co. has installed a new scale at its elevator in Stephen, Minn.

The Minnesota Elevator Co. has opened its house at Claremont, Minn., with Dennis Lynch in charge as agent.

The Hennepin Elevator Co.'s new house at Downer, Minn., is reported finished and ready for operation.

The Hubbard & Palmer Elevator at Elmore, Minn., is now open for business with A. C. Stolte in charge.

F. G. Lorens has secured a site at Center City, Minn., and will erect an elevator and a potato warehouse.

A flat house will be built at Arco, Minn., for the Stewart Elevator Co. Lund, Rud & Co. are the contractors.

E. L. Williams, late of Lake Benton, Minn., has taken charge of the elevator he recently bought at Arco, Minn.

A farmers' elevator is being erected at a point about three miles from Cleveland, Minn., known as "Hobo Siding."

A new dump and scale have been placed in the Jacobi Elevator at Hallock, Minn., and other improvements made.

The Soo Elevator Co.'s house at Rushmore, Minn., has been opened for business with George Innes as manager.

The erection of a large elevator at St. Cloud, Minn., by the Minnesota Farmers' Exchange, is said to be contemplated.

The Farmers' Elevator Co. of Hardwick, Minn., is building an elevator and has elected M. L. Wahlert manager and buyer.

The Stewart Elevator Co. is reported to have bought a tract of land in South Minneapolis, Minn., for an elevator site.

Henry Rippe has decided not to open his elevator at Sherburn, Minn., this year on account of the crop shortage there.

The Farmers' Co-operative Elevator Association of Hutchinson, Minn., has secured a site and is erecting an elevator.

An elevator is being built in the new town of Angora, Minn., on the new Soo extension near the White Earth Agency.

The 30,000-bushel elevator of the Kandiyohi Farmers' Union Elevator Co. at Kandiyohi, Minn., is nearing completion.

The Duluth Elevator Co. has closed its house at Rothsay, Minn., and transferred its agent, H. V. Heald, to Angus, Minn.

Extensive repairs and improvements have been made to the elevator at Medford, Minn., of which H. D. Adams is manager.

A branch of the Minnesota State Farmers' Exchange has been organized at Mankato, Minn., and an elevator is to be built.

The Farmers' Elevator Co. of Lafayette, Minn., has torn down its old office and engine room and built a new one on the site.

The Jackson Milling Co. has increased the capacity of its elevators at Stevens Point, Wis., from 12,000 to 27,000 bushels.

W. D. Parker of Woodstock, Minn., has bought the elevator at Hatfield, Minn., formerly owned by D. C. Harrington of Pipestone, Minn. Herbert

Parker, a son of the new owner, will operate the elevator.

The Farmers' Elevator Co. of Cottonwood, Minn., is building a frame office and brick gasoline engine house near its elevator.

The Western Elevator Co. has leased the Farmers' Elevator at Elgin, Minn., and placed Chas. Richmond in charge as buyer.

Peter Schroeder, proprietor of the Globe Flour Mills at Perham, Minn., has bought the Northern Pacific Elevator at that place.

A new foundation has been placed under the Stedman Elevator Co.'s elevator at Sauk Center, Minn., and a new cupola built.

P. F. Nash was elected secretary and treasurer of the Farmers' Elevator Co. of Nashua, Minn., at the recent annual meeting.

Howard & Bemis have reopened their elevator at Trosky, Minn., which was closed while some improvements were being made.

The Minneapolis & Northern Elevator Co. has closed its house at Erskine, Minn., on account of the crop shortage in that section.

Theo. Richards is erecting a flat house at Stewart, Minn. This gives that town six elevators, three line and three independent houses.

The New London Milling Co. of New London, Minn., has equipped its elevator at Mora, Minn., with an improved Hall Distributor.

The directors of the Ellendale Farmers' Elevator Co. of Ellendale, Minn., have succeeded in securing a site for the erection of an elevator.

The Red Lake Falls Milling Co. of Red Lake Falls, Minn., is building an elevator at Holt, Minn., on the new Great Northern extension.

Farmers around Slayton, Minn., are after the Minnesota Railroad and Warehouse Commission to secure a loading platform at that point.

The Peavey Elevator Co. will not open its flat house at Hadley, Minn., this fall. This leaves the field at that place to the two other elevators.

Andrew Overstad will continue to operate his elevator at Hancock, Minn., the deal for its purchase by the farmers having fallen through.

The Osborne-McMillan Elevator Co.'s elevator at Otter Tail, Minn., has been completed and opened for business with Henry Miller in charge.

Lund, Rud & Co. of Minneapolis have the contract to build a 25,000-bushel grain elevator at Maynard, Minn., for the D. A. McDonald Elevator Co.

The Westbrook Milling Co. of Westbrook, Minn., is building a 20,000-bushel elevator at Dovray, Minn. L. O. Hickok of Minneapolis is the contractor.

Edward Weirill has leased the elevator at Le Sueur, Minn., owned by the local milling company, and will operate it. A gasoline engine has been installed.

The Farmers' Co-operative Elevator Co., which was organized a short time ago at Luverne, Minn., has bought E. A. Brown's elevator and sheds at that place.

William and Ed Lahr, late of Parkersburg, Iowa, have engaged in the grain, lumber and fuel business at Conger, Minn., under the firm name of Lahr Bros.

The New London Milling Co. of New London, Minn., will erect an elevator and a flour warehouse on the Great Northern right-of-way at Milaca, Minn.

The Norman County Elevator Co. of Ada, Minn., has elected Jacob Hadler, president, and Louis Phund, secretary. Emily Betcher has been engaged as buyer.

The Prairie Elevator Co. of Minneapolis is building elevators at Baxter and Westville, Minn., two new towns on the new extension of the "Soo" north of Detroit, Minn.

A. E. Gates has bought the old Great Western Elevator at Rochester, Minn., and is remodeling it. He will operate it in connection with his other house at that place.

The Northwestern Elevator Co. is repairing its elevators No. 1 and No. 2 at Minnesota Transfer, Minneapolis, which were badly damaged by the tornado of August 20.

The Consolidated Milling, Elevator and Power Co. of Chippewa Falls, Wis., has filed an amendment to its charter decreasing its capital stock from \$75,000 to \$50,000.

The C. S. Christensen Co. of Madelia, Minn., has secured a site for its new elevator on the railway right-of-way near the mill and the building is now in course of construction.

The Bemidji Elevator Co. has filed articles of incorporation at Bemidji, Minn., with a capital stock of \$10,000, to deal in grain and hay. The incorporators are E. H. Smith, L. E. Moyer and

G. F. Smith, all of Duluth. A 30,000-bushel elevator, a feed mill and a warehouse are now being built.

Work is in progress on the construction of an elevator at Pettis Siding, on the Milwaukee road near St. Peter, Minn., for the local branch of the National Farmers' Exchange.

The elevator at Worthington, Minn., known as the Swedish Elevator, has been opened by the Truax Elevator Co. with C. L. Johns in charge. A new engine has been installed.

The New Richmond Roller Mills Co. of New Richmond, Wis., has converted its warehouse at Jewett, Wis., into an elevator. The necessary machinery and a gasoline engine have been installed.

The W. W. Cargill Co. is building a 25,000-bushel elevator at Independence, Wis. It will be 24x27 feet in size and 50 feet high. A 6-horsepower gasoline engine will be installed for operating purposes.

The Loftus-Hubbard Elevator Co. of St. Paul, Minn., has sold its elevator and feed mill at Stillwater, Minn., to Fred Luchsinger and B. B. Thelen of that place. The new owners will operate the plant.

The Federal Elevator Co. has sold its elevator at Detroit, Minn., to the Prairie Elevator Co. and the house has been moved to a new site in that town. Coal sheds and an office will be built and the elevator remodeled.

It is reported that the Farmers' Co-operative Elevator and Mercantile Co. of Owatonna, Minn., will reopen its elevator, which has been closed since last June when the former manager was arrested, charged with embezzlement.

L. N. Loomis has transferred his line of elevators in Southern Minnesota to the Milwaukee Elevator Co. Two of the houses are at Canton and Preston, Minn. C. I. Hartson will continue in charge of the one at the latter place for the new owners.

The Stewart Elevator Co. of Minneapolis has bought a site at Clearwater, Minn., and is building an elevator. Lund, Rud & Co. of Minneapolis are the contractors. C. H. Schauer will have charge of the elevator when it is completed.

The Osborne-McMillan Elevator Co. has closed its house at Barrett, Minn., on account of the damage to the wheat crop in that section by rust. O. H. Tinseth, who was to have charge of the elevator, has been transferred to Fingal, N. D.

The Walter-Bowman Elevator Co. has bought James Cowin's elevator and corn cribs at Adrian, Minn., and taken possession. The Walter-Bowman Elevator Co. is a new corporation which has recently opened general offices at Mankato, Minn.

The Underwood Grain Association of Underwood, Otter Tail County, Minn., is the style of a new farmers' corporation capitalized at \$20,000. A grain and milling business is to be done. Peter Jensen is president and N. P. Pederson, secretary.

C. H. Maginnis and H. J. Gude, who have been doing business at Duluth, Minn., under the style of the East End Feed and Grain Co., have dissolved partnership. The former will continue the business in partnership with his brother, J. H. Maginnis.

Howard & Bemis, grain dealers of Edgerton, Minn., have leased the Harrington elevators at Gray Siding and Pipestone, Minn., from Ashton & Gurley of the latter place. The houses have been opened for business under the new management.

Some improvements have been made to the Pacific Elevator Co.'s house at Gaylord, Minn. A new cement floor has been placed in the engine room and that structure has been remodeled. A new Fairbanks-Morse Gasoline Engine has also been installed.

The C. M. & St. P. Ry. has appropriated \$10,000 to increase the capacity and improve the facilities of its Elevators A and C at Milwaukee, Wis. The capacity of the houses will probably be increased to 100,000 bushels each and additional sidetrack facilities will be provided.

The Fergus Falls Milling Co. has sold its old elevator in the Great Northern yards at Fergus Falls, Minn., to the Dakota Elevator Co. and it is being torn down. Part of the lumber will be used in repairing the Dakota Elevator and the balance will be shipped elsewhere.

The Trevor Elevator Co. has been incorporated with a capital stock of \$25,000, to deal in grain, hay, etc. The principal place of business is to be at Minneapolis, Minn. Frederick A. Pierce and Joseph A. Pierce of Duluth, and Frank A. Pierce of St. Paul, are the incorporators.

The A. E. Anderson Co. of Minneapolis has purchased the elevator at Pipestone, Minn., owned by W. W. Fletcher. D. C. Harrington, who formerly operated a string of elevators for himself will have charge for the new owner. The elevator has a capacity of 18,000 bushels and was operated

by the W. W. Cargill Co. before it was bought by Mr. Fletcher, about two years ago. The consideration in the recent transfer was \$4,500.

The Kenneth Farmers' Elevator Co. of Kenneth, Minn., has incorporated with a capital stock of \$25,000 to do a grain business on the cooperative plan. Kittiel Olson is president and John Engebretson, secretary. The company wants to buy an elevator at Kenneth.

A farmers' organization has been formed at Heron Lake, Minn., under the style of the Farmers' Co-operative Elevator Co. The company will either buy or build an elevator at Heron Lake. The capital stock of the organization is \$50,000. The president is Jerry Sullivan; secretary, L. F. Lammers; treasurer, C. F. Morley.

P. J. Harger has installed a feed mill outfit, with a capacity of 60 bushels an hour, in his elevator at Faribault, Minn. Some cleaning machinery has also been installed and a 15-horsepower motor put in to operate the additional equipment. His son, Ira Harger, formerly with the Faribault Roller Mills, will have charge of the feed mill.

Part of the Inter-State Grain Co.'s elevator at Wadena, Minn., has been torn down, reducing the capacity from 60,000 to 16,000 bushels. The building will be moved back from its present site on the N. P. right-of-way to a new location, making room for the laying of new double tracks and sidetracks. The house will then be remodeled and put in first-class shape.

MISSOURI, KANSAS AND NEBRASKA.

An elevator is to be built at Sholes, Neb.

A farmers' elevator is being built at Unadilla, Neb.

J. M. Cox is building an addition to his elevator at Hampton, Neb.

W. H. Roe is building an addition to his elevator at Kearney, Neb.

W. S. Hart has completed an addition to his elevator at Allen, Neb.

The Nye-Schneider-Fowler Co. has completed its new elevator at Oakdale, Neb.

The dissolution is reported of the Mound Ridge Grain Co., Mound Ridge, Kan.

The Albion Milling Co. will rebuild its recently burned elevator at Albion, Neb.

F. J. Lornegan is building an elevator near his flour mill at Broken Bow, Neb.

The W. M. Chelf Elevator Co. is building a 20,000-bushel elevator at Scandia, Kan.

E. F. Marshall's new elevator at Weeping Water, Neb., is completed and in operation.

A new foundation has been placed under the Omaha Elevator at Stromsburg, Neb.

Bossemeyer Bros. have succeeded G. M. Smith in the grain trade at Concordia, Kan.

A flour and feed room has been added to W. H. Ferguson's elevator at Phillips, Neb.

The Farmers' Grain and Live Stock Association of McCool, Neb., has been chartered.

Henry Roberts of Tekamah, Neb., is reported to be erecting an elevator at Hooper, Neb.

The Brown Elevator Co. has purchased a site at Hooper, Neb., and will erect an elevator.

T. B. Hord has built a double corn crib, 32x128 feet in size, near his elevator at Neligh, Neb.

T. O'Shea has succeeded to the grain and lumber business of O'Shea & McBride at Madison, Neb.

The Farmers' Elevator Co. of Wilber, Neb., has been incorporated with a capital stock of \$15,000.

J. H. Pope is reported to have sold his elevator at Roseland, Neb., to the Roseland Grain and Supply Co.

The Fullerton Elevator Co. of Fullerton, Neb., has commenced business with J. N. Campbell as manager.

The new elevator of the Saronville Farmers' Elevator Co. at Saronville, Neb., is completed and in operation.

The Simonds-Shields Grain Co. of Kansas City, Mo., has increased its capital stock from \$10,000 to \$50,000.

The new Missouri Pacific Elevator at Kiowa, Kan., is completed. P. H. Pelkey of Wichita, Kan., was the contractor.

The elevator of the Ewart-Wilkinson Grain Co. at Helvey, Neb., will be equipped with an improved Hall Distributor.

The S. C. Lee Grain Co., has sold its National Elevator in the Kansas City East Bottoms, to the C. A. Dayton Grain Co. for \$12,500.

The Farmers' Elevator Co. of Goehner, Neb., has been chartered with a capital of \$4,000. George Watts is president and Martin Madison Jr., secretary-treasurer. The company is a branch of the National Farmers' Exchange and will build an ele-

vator. At present a track shipping business is being done.

Plans have been prepared for the erection of a 600,000-bushel grain elevator at Kansas City, Kan., for the J. Rosenbaum Grain Co. of Chicago.

The Nebraska-Iowa Grain Co. has purchased four improved Hall Distributors for its new 100,000-bushel elevator at Gibson (Omaha), Neb.

The Laning-Harris Coal and Grain Co. of Kansas City, Mo., has filed an amendment to its charter, increasing its capital stock from \$80,000 to \$200,000.

The Wellington Milling and Elevator Co. has completed and started up its new elevator at Wellington, Kan. J. H. Rutherford has charge of the new house.

Oscar Wells has sold his elevator at Sweetwater, Neb., to the Sweetwater Milling Co. He will continue to operate his elevators at Cairo and St. Michael, Neb.

Joseph Whyte, who recently sold his interest in the Nebraska Elevator Co. of Lincoln, Neb., has bought the elevator at Palmyra, Neb., and moved to that place.

At a meeting of the directors of the Farmers' Independent Elevator Co. of Blue Springs, Neb., arrangements were made for remodeling the company's elevator.

Smith Bros., grain dealers of Red Cloud, Neb., have incorporated their business under the style of Smith Brothers, Incorporated, with a capital stock of \$10,000.

The Eagle Mill and Elevator Co. of Higginsville, Mo., has been incorporated with a capital stock of \$14,000. The directors are: F. H. Kueck, Christ Temple and F. C. Hoefler.

The Kelly & Lysle Milling Co. of Leavenworth, Kan., has bought the elevator at that place formerly owned by the Rush Milling Co. It has been overhauled and put in operation.

The Atlas Elevator Co. is rebuilding its elevator at McLean, Neb., which was recently destroyed by fire. The new house will have a capacity of 40,000 bushels and will cost about \$15,000.

Butterfield & Sons of Humboldt, Neb., have taken possession of the elevator at Table Rock, Neb., recently purchased from C. R. Smith, and will make a number of improvements.

The J. P. Baden Milling Co. has let the contract for the erection of a 50,000-bushel steel storage tank near its "Elevator B" at Winfield, Kan. The tank will be 50 feet high and 40 feet in diameter.

The Elgin Farmers' Elevator Co. of Elgin, Neb., has purchased the Nye-Schneider-Fowler Co.'s elevator at that place, the consideration being \$9,563. James Anderson is president of the farmers' organization.

A 50,000-bushel steel storage tank, 49 feet in diameter and 50 feet high, is being erected near the Hutchinson Mill Co.'s 350-barrel flour mill at Hutchinson, Kan. It rests on a stone and concrete foundation. R. C. Stone of Springfield, Mo., is the contractor.

The Lee-Warren Milling Co. of Salina, Kan., has leased the 15,000-bushel Rock Island Elevator at New Cambria, Kan. E. M. Donnemeyer of that place is in charge. The elevator was completely overhauled and remodeled a short time ago and a new foundation put in.

The recently chartered McConaughty Grain Co. of Holdrege, Neb., has taken over all the Nebraska elevators owned by Milmine, Bodman & Co. C. J. Miles of Hastings, Neb., is president of the new corporation and C. W. McConaughty secretary, treasurer and general manager.

M. T. Cummings has sold a one-half interest in his grain and fuel business at Beatrice, Neb., to W. R. Laughlin of St. Joseph, Mo. The new firm, which has one of the largest elevators on the B. & M. between Omaha and Kansas City, will do business under the style of Cummings & Laughlin.

The Rock Milling and Elevator Co.'s new 75,000-bushel metal-clad elevator at Hutchinson, Kan., is completed and in operation. The new plant consists of an elevator, 40x60 feet in size, and a brick engine room, 30x40 feet. It is operated by steam power and equipped with a full line of grain cleaning machinery.

The Alexander Milling Co. of Winfield, Kan., has completed its 11,000-bushel elevator at Kellogg, Kan. The foundation and bins are built of concrete and there are separate dumps for soft and hard wheat. A 9-horsepower gasoline engine has been installed to operate the machinery. R. E. Rogers is in charge as manager.

The Santa Fe Railroad has completed plans for the construction of a 1,000,000-bushel grain elevator in Argentine, Kansas City, Kan. The company now has a 1,000,000-bushel elevator in Argentine, but the handling of grain in Kansas City has increased so rapidly that the Santa Fe has found

that another elevator is an absolute necessity. The new elevator will be near the present elevator.

A branch of the National Farmers' Exchange has been formed at Straussville, Neb., to build a cooperative elevator and engage in the grain business. Over \$3,000 of the capital stock has been subscribed.

CANADIAN.

An elevator is being built at Purves, Man.

William Duthie has sold his flour and feed business at Vancouver, B. C.

An elevator is being built at Davidson, Man., by the North Star Elevator Co.

John Linchan has erected a 30,000-bushel grain elevator at Okotoks, Alberta.

R. J. Scott has engaged in the flour and feed business at Lacombe, Alberta.

Gordon, Ironside & Fares are said to be erecting an elevator at Port Arthur, Ont.

Two more elevators are being built at Snowflake, Man., making five at that point.

The North Star Elevator Co. has completed its new elevator at Abernethy, Man.

The machinery has been installed in the new elevator at Pincher Creek, Alberta.

John MacLean & Co. have succeeded the MacLean-Manson Grain Co. at Winnipeg, Man.

William Rosie has sold his grain and feed business at Victoria, B. C., to Shotbolt & Horne.

The Arcola Farmers' Elevator Co. of Arcola, Assa., has declared a dividend of 40 per cent.

Knittle & Co., millers of Boissevain, Man., have bought J. J. Heaslip's elevators at Alameda, Assa.

McLaughlin & Ellis are rebuilding their elevator at Cartwright, Man., which was burned on July 17.

The premises of A. Parks, flour and feed dealer at Belleville, Ont., were damaged by fire recently.

E. Fournier & Co., hay and grain dealers at St. Simon De Yamaska, Que., have dissolved partnership.

A loading platform has been put in at Estevan, Assa., to enable the farmers to ship their own grain.

The Colonial Elevator Co.'s new house at Abernethy, Man., is reported completed and ready for operation.

William H. Schmidt, Montreal, Que., has registered under the style of E. A. Schmidt, grain and freight broker.

Andrews & Gage of Winnipeg, Man., and the Sorlien-O'Connor Co. are erecting grain elevators at Macoun, Assa.

Gamble & Yeo will build a chop mill at Moose Jaw, Assa., to be operated in connection with a flour and feed store.

The new 2,500,000-bushel elevator of the Canadian Northern Railway Co., at Port Arthur, Ont., has been opened for business.

T. Wadge of Park River, N. D., and capitalists from the States are planning the erection of a cleaning house at Winnipeg, Man.

The Columbia Flouring Mills Co., Ltd., is now erecting its 40,000-bushel elevator at Lethbridge, Alberta. The headquarters of the company are at Enderby, B. C.

A 1,000,000-bushel elevator is to be built at Keewatin, Ont., in connection with the proposed 3,500-barrel mill of the Keewatin Flour Mills Co., Ltd. The plans for the latter structure have already been prepared.

The Anglo-Canadian Elevator Co. is building 30,000-bushel elevators at each of the following Assiniboia points: Drinkwater, Milestone and Boharm. The company will also probably build or buy an elevator at Moose Jaw, Assa.

The Brackman-Kerr Milling Co., Ltd., will not build its proposed grain storage tank at Strathcona, Alberta, this year, owing to its inability to secure steel for that purpose. The rest of the material will, however, be placed on the ground this fall, and the tank will be built next spring.

The Young Grain Co. of Winnipeg, Man., has been incorporated with a capital stock of \$300,000 to do a grain and milling business. The provisional directors include Hon. F. McNaughton Young and T. Buck, of Killarney, Man.; C. A. Young, of Winnipeg; D. D. Young of Dunrea, Man., and F. W. Young of Boissevain, Man.

The Dominion Transportation Commission has recommended the erection of a 2,000,000-bushel grain elevator at Port Colborne, Ont., and the Railways and Canals Department has invited tenders for the construction of the same. It is expected to lay the foundation of the elevator this fall and have it ready for operation in time for next year's crop. The elevator is expected to aid in diverting grain

traffic from Buffalo. Tenders have also been asked for the construction of the proposed harbor improvements at Port Colborne.

About 300 employees of the Barnett & Record Co. are at work on the Empire Elevator Co.'s new grain elevator at Fort William, Ont. The structure is being rushed to completion as rapidly as possible and is expected to be ready for business early in October. It will have a storage and handling capacity of about 2,000,000 bushels.

The A. Kelly Milling Co. of Brandon, Man., has taken over the elevators recently purchased for \$35,000 from the Truesdell Grain Co. of Minneapolis, Minn. The houses are located at Rocanville, Carlysle, Coulter and Arcola, Assa, and Pettapiece and Lyleton, Man., on the Canadian Pacific Railway. The A. Kelly Milling Co. now has a string of 25 elevators in the Canadian Northwest.

The Montreal Warehousing Co.'s new 1,000,000-bushel elevator at Windmill Point, Montreal, Que., will be of steel construction, with tile roofs and concrete floors. The windows will have metal frames and will be glazed with wire glass. A brick wall will surround the working story of the elevator and the cupola will be covered with galvanized corrugated steel. The building will be 238x84 feet in dimensions. The equipment will include 10 elevator legs, five of which will be used for receiving grain, but all of them may be used for shipping. This will give an elevating capacity of about 100,000 bushels an hour. There will be five pairs of power shovels for unloading cars and a car puller with four drums to pull cars in either direction on the two tracks. The house will be equipped with a passenger elevator for the use of the employees. Ten hopper scales, with a capacity of 2,000 bushels each, will be installed, together with a full line of cleaning machinery. Two 36-inch belt conveyors in the cupola will distribute grain longitudinally of the house through the trolley spouts on the distributing floor. A marine tower will be built on the side of the elevator next to the Lachine Canal and will contain a marine leg capable of elevating 15,000 bushels of grain an hour. An extensive belt conveyor system will also be built to deliver grain from the elevator to vessels lying in the Windmill Point basin, through 19 marine loading spouts. Two loading spouts will be provided to load barges in the Lachine Canal Basin No. 1. All the machinery in the new elevator will be driven by electric motors. The foundation, which is now in, is of concrete and rests on piles.

THE DAKOTAS.

Delaney Bros. are building an elevator at Wheelock, N. D.

T. N. Wold is building a 25,000-bushel elevator at Sawyer, N. D.

The new Thorpe Elevator at Lidgerwood, N. D., is completed.

Koth & Schub are building a grain elevator at Underwood, N. D.

An independent elevator will be built at Denbigh, N. D. this fall.

John Mundt's new elevator at Crooks, S. D., is said to be completed.

The Atlantic Elevator Co. has closed its house at Lidgerwood, N. D.

W. J. Loomis is erecting an independent elevator at Enderlin, N. D.

The Farmers' Elevator Co. at Reynolds, N. D., is building an elevator.

An addition has been built to N. J. Olsen's elevator at Sanborn, N. D.

The Sutherland Elevator Co. is building an elevator at Edmunds, N. D.

A movement is on foot to build an independent elevator at Orient, S. D.

De Laney Bros. of Williston, N. D., are building an elevator at Tagus, N. D.

Frank M. Brown & Co. of Huron, S. D., have erected a new grain office.

Thomas Engelbretson has been granted an elevator site at Naples, S. D.

Wiltshko Bros. are building an elevator on their farm near Carrington, N. D.

An addition is being built to the Farmers' Elevator at Church's Ferry, N. D.

J. P. Williams has secured a site at Delmont, S. D., and will erect an elevator.

Woodworth Bros.' new elevator at Velva, N. D., is completed and receiving grain.

The Hubbard & Palmer Co. has completed its elevator at Valley Springs, S. D.

The Reliance Elevator Co. has overhauled and repaired its house at Tyler, N. D.

An addition, 12x30 feet, is being built to the Grams Elevator at Bowbells, N. D.

The Robinson Elevator Co. has sold its flat house at Harvey, N. D. The company has decided

not to build its proposed new elevator at Harvey this year.

Martin & Buechler's new elevator at Goodrich, N. D., is about ready for business.

A. A. Robinson is building a 30,000-bushel elevator and a feed mill at Rolla, N. D.

At Gary, S. D., the Farmers' Elevator Co.'s new elevator is about ready for business.

The Occident Elevator Co. of Jamestown, N. D., will build an elevator at Medina, N. D.

The Winfred Grain Co. has bought the Madison Elevator Co.'s house at Madison, S. D.

Bailey & Christensen are building a 50,000-bushel elevator near their mill at Mitchell, S. D.

I. L. Berge has completed his new flat house at Vela, N. D., and commenced buying grain.

Torrence Bros. have purchased an improved Hall Distributor for their elevator at Tabor, S. D.

Work has been commenced on the erection of Herman Backhaus' new elevator at Linton, N. D.

The Atlas Elevator Co. has bought the Hollandsworth-Hart Co.'s lumber yard at Columbia, S. D.

A. L. Foster's new 15,000-bushel elevator at West Hope, N. D., is about ready for operation.

The eighth elevator is being built in West Hope, N. D., and will be known as the Rice Elevator.

Fred Kuder, a farmer near Valley City, N. D., is building a 25,000-bushel elevator on his farm.

The Acme Grain Co. has bought the flat house at Riga, N. D., and is converting it into an elevator.

An 8-horsepower gasoline engine has been installed in the Farmers' Elevator at De Smet, S. D.

The Harvey Farmers' Co-operative Association is building a 50,000-bushel elevator at Harvey, N. D.

The new National Elevator at Cogswell, N. D., is now ready for operation. Elmer Roberts is buyer.

The Farmers' Elevator Co. of Coleman, S. D., has completed a new 35,000-bushel elevator at that place.

E. A. Brown has torn down his old elevator at Clear Lake, S. D., and is erecting a new one on the site.

J. T. Scroggs of Beresford, S. D., has bought the elevator at Montrose, S. D., owned by Theopolis Bros.

T. H. Jameson has sold his elevator at Pittsburg, N. D., to Mitchell & McLeod of Bowesmont, N. D., for \$18,000.

A 15,000-bushel elevator is being erected in connection with the Glen Ullin Roller Mills at Glen Ullin, N. D.

The Farmers' Co-operative Elevator Society of Sisseton, S. D., is now building an elevator to cost about \$4,000.

The Central Dakota Flour Mill Co. of Arlington, S. D., has installed two improved Hall Distributors in its elevator.

The Twin Brooks Farmers' Elevator Co. has completed its 20,000-bushel elevator at Twin Brooks, S. D.

The Russell-Miller Milling Co.'s new 55,000-bushel concrete elevator at Valley City, N. D., is reported about completed.

The contract has been let for the erection of the new Farmers' Elevator at Surrey, N. D. It will cost about \$4,000.

The McCaull-Webster Elevator Co. has remodeled its house at Yankton, S. D., and installed a gasoline engine.

Metz & Fritts have completed the remodeling of their elevator at Miranda, S. D., and installed a gasoline engine.

The Andrews & Gage Elevator at Pingree, N. D., has been opened for the season with Iver Rasmussen as manager.

Lund, Rud & Co. of Minneapolis, Minn., are building a 25,000-bushel elevator at Myra, N. D., for Walker & Hugh.

The Royal Elevator Co.'s new house at Manfred, N. D., which replaces the one burned a short time ago, is completed.

F. C. Kemlicka has been awarded an elevator site at Kimball, S. D., by the South Dakota board of railway commissioners.

The Northwestern Elevator Co. is rebuilding its elevator at Willow Lake, S. D., which was recently wrecked by a cyclone.

A farmers' elevator company has been organized at Sheyenne, N. D., with C. W. Hall as president and P. S. Peterson, secretary.

The Acme Elevator Co.'s new elevator at Oriska, N. D., is completed and open to receive grain. Thomas Crawford is the buyer.

Honstain, Bird & Co. of Minneapolis are building a 50,000-bushel elevator at New Rockford, N. D., for the Farmers' Elevator Co. It will be completed about the middle of this month. A 20-horse-

power gasoline engine will be installed to operate the machinery.

The Anchor Grain Co. is building a 60,000-bushel elevator at Souris, N. D. The company's old house at that place burned last month.

The Acme Grain Co. of Minneapolis, Minn., has purchased eleven elevators along the line of the Great Northern in North Dakota.

A cooperative elevator is being built on the Great Northern right-of-way at Leeds, N. D. About twenty-five farmers are interested.

The Manfred Farmers' Elevator Co. has been incorporated at Manfred, N. D., and will erect an elevator. P. B. Anderson is secretary.

The Maddock Grain and Fuel Co. has bought the Great Western Elevator Co.'s elevator at Maddock, N. D., paying \$5,800 for the same.

A new elevator is nearing completion at Tripp, S. D., for the South Dakota Grain Co. It replaces the old house which was recently razed.

The Minneapolis & Northern Elevator Co. is erecting a new elevator at Willow City, N. D., to replace the one which burned last spring.

Construction work on Ely, Salyards & Co.'s new elevator is Litchville, N. D., is now in progress. This will make four elevators at Litchville.

The new Atlas Elevator at Miranda, S. D., which replaces the one burned a short time ago, is completed. It has a capacity of 30,000 bushels.

The new elevator being built at Mapes, N. D., by the Farmers' Elevator Co. will be ready for operation about the middle of this month.

The Ashley Roller Mill Co. is now building the elevator annex to its flour mill at Ashley, N. D. The elevator will be 28x40 feet in dimensions.

An elevator is being built at Esmond, S. D., by B. Gartland and Robert Wilson of Iroquois, S. D. It is said they will also build at Manchester, S. D.

H. C. Webb, who was formerly in the grain business at Granville, N. D., is building an elevator at Deering, N. D., on the Great Northern right-of-way.

The Sullivan Elevator Co.'s new 22,000-bushel elevator at Marion, N. D., is nearly completed. Geo. Govig of Sisseton, S. D., will have charge as buyer.

Wait & Dana, publishers of the Armour Herald at Armour, S. D., have secured a site and are erecting an elevator. This will make six elevators at Armour.

The Great Western Elevator, which was formerly at Valley City, N. D., has been moved to Berea, N. D., by the new owners, the Russell-Miller Milling Co.

The Empire Elevator Co. has sold its elevator at Britton, S. D., to Thomas Clark and George Bingham of that place. There are now no line houses at Britton.

The Northwestern Elevator Co. is erecting an engine house at its elevator in Edinburg, N. D., and will install an engine to take the place of the present horsepower.

A large addition is being built to N. J. Olson & Co.'s elevator at Litchville, N. D. A new 16-horsepower gasoline engine has been installed to operate the enlarged plant.

The Farmers' Elevator Co., of Lane, S. D., a new town on the Milwaukee extension between Woonsocket and Wessington Springs, S. D., has been granted an elevator site.

The Farmers' Elevator Co. of Edmore, N. D., a new cooperative corporation with a capital stock of \$5,000, is building an elevator and expects to have it completed by October 1.

McCabe Bros. have bought the Farmers' Elevator at Bottineau, N. D. They have also purchased the elevator at Barton, N. D. This gives the firm a string of twelve houses in North Dakota.

A farmers' organization is being formed to build an elevator at the new town on the Milwaukee road between Scotland and Tripp, S. D. The town is just laid out and has not been named.

C. W. Thompson, a grain dealer of Parker, S. D., has secured a site at Centerville, S. D., and awarded the contract for the erection of a 20,000-bushel cribbed elevator. It is to be completed by October 1.

E. C. Huyck of Minneapolis has become associated with G. S. Walker in the grain, feed and fuel business at Casselton, N. D., acquiring the interest of M. A. Korthof, who was seriously injured last spring.

Clifton H. Sowle, formerly agent for the Imperial Elevator Co. at Granville, N. D., and later associated with R. L. Richardson in the grain trade at that point, has purchased the interest of Mr. Richardson in the business.

A recently organized cooperative company at Rugby, N. D., has bought the St. Anthony & Dakota Elevator Co.'s house. J. H. Lockwood is at the head of the new enterprise and the same

prices will be paid for grain as at the line houses. About sixty local farmers are stockholders.

The Farmers' Elevator Co. of Bath, S. D., has made a failure of the cooperative grain business and will sell its elevator, going out of business. The failure of the company is said to be due to overgrading the grain of its patrons.

C. G. Ireys, who owns a string of seven elevators along the Soo line in North Dakota, has moved his headquarters from Kenmare to Minot, N. D. The elevators at located at Bowbeis, Foxholm, Drake, Martin, Kenmare, Manfred and Fessenden.

A cooperative company, to be known as the Farmers' Elevator Co., has been organized at Lakota, N. D. An elevator is to be built, but owing to the lateness of the season it will not be erected this year. If an elevator can be leased this season the company will commence business.

COMMISSION

It is reported that Freemore & Swan, grain commission, Minneapolis, have dissolved.

R. L. Thornton has embarked in the general brokerage and commission business at Chicago.

J. J. Gehlen has opened a commission office in the First National Bank Building at Le Mars, Iowa.

The Van Dusen-Harrington Co. of Minneapolis has filed amended articles of incorporation increasing the capital stock from \$200,000 to \$1,000,000.

Hulburt, Warren & Co. of Chicago have decreased their capital stock from \$250,000 to \$150,000.

The Simonds-Shields Grain Co. of Kansas City, Mo., has increased its capital stock from \$10,000 to \$50,000.

James C. Eaton, formerly with H. Poehler & Co. of Duluth, is now representing the Minnesota Grain Co. on 'change in that city.

J. Schaak, for years with Irwin, Green & Co., Chicago, went with Bartlett, Frazier & Carrington, of this city, on September 1.

F. R. Partridge is representing Kneeland, Clement & Curtis of Chicago in the wheat pit, having assumed this position on September 1.

W. J. Fyffe of Chicago has transferred his commission business to the Harris-Scotten Co. and is representing the latter firm in the wheat pit.

The liabilities of the bankrupt grain firm of Heathfield & Washburn, Buffalo, N. Y., are \$18,693.34 and the appraised value of the assets is \$11,031.75.

E. P. Bacon & Co. of Milwaukee announce that they have arranged with J. E. Sims to represent them in Northwestern Iowa, Minnesota, South Dakota and Nebraska.

The Interstate Grain Co. has been incorporated at Cincinnati, Ohio, by W. S. Todd, A. F. Broomhall, J. O. Davis, C. S. Emerick and J. C. Fullerton. The capital stock is \$25,000.

It is announced that Robert Bell is about to establish himself in the grain business at Indianapolis. He was formerly of the Crabbs, Reynolds & Bell Grain Co., Lafayette and Crawfordsville, Ind.

The Ames-Barnes Co. of Duluth has been incorporated with a capital stock of \$25,000 to do a grain commission business. The incorporators are Ward Ames Jr., Ward Ames Sr., and Julius H. Barnes.

Articles of incorporation have been filed by John Rankin & Co. of Chicago, capitalized at \$2,500, to deal in grain and cereals. The incorporators are Isabella B. Rankin, Jessie H. Rankin and John L. Pearson.

The A. D. Wright Grain Co. of Kansas City, Mo., has been incorporated with a paid-up capital stock of \$10,000. Grant W. Kenney, J. Sidney Smith, A. D. Wright, J. M. Sewall and E. A. Twidale are incorporators.

A. I. Valentine, president of the Armour Grain Co., returned to Chicago on September 3, after an absence of three months in Europe. He was given an enthusiastic reception when he made his appearance in the wheat pit.

The Home Grain Co. of West Virginia has filed supplemental articles of incorporation under the laws of Missouri, with an office at Kansas City. The company is capitalized at \$150,000, of which \$25,000 is employed in Missouri.

At the annual meeting of the Lee & Gingery Co., held at the company's office at Sauk Center, Minn., on September 10, the following officers were elected: M. W. Lee, president; W. O. P. Hillsdale, vice-president; L. W. Gingery, secretary and manager, and C. M. Sprague, treasurer. These gentle-

men and C. L. Perkins constitute the new directory. The company paid a dividend of 16 per cent on last year's business.

Donald Morrison & Co. is the style of a new grain commission firm that has commenced business at 417 Grain Exchange Bldg., Winnipeg. Mr. Morrison, the head of the firm, is from Duluth, where for many years he was with the John Miller Grain Co.

Harry Swart, of late years manager of the Great Northern Elevators, at Duluth, and prior to that in the grain business in Duluth and Minneapolis, as office and floor man, has removed to Winnipeg, where he has taken the position of manager for the Zenith Grain Co.

The McCaull-Dinsmore Co. on September 1 succeeded the McCaull-Webster Grain Co. of Minneapolis. The executive officers of the present house are: J. L. McCaull, president; R. A. Dinsmore, vice-president; T. J. McCaull, secretary; A. M. Dinsmore, treasurer.

F. M. Davies & Co. of Minneapolis have incorporated with a capital stock of \$50,000 to engage in the grain and provision business. F. M. Davies, of Minneapolis, is president; A. Owen, Langford, S. D., vice-president, and Reginald J. Healy, Minneapolis, secretary-treasurer.

Horace Wing, who has been in the wheat pit of the Chicago Board of Trade for Pringle, Fitch & Rankin, has engaged in the commission and brokerage business on his own account. Edward W. Flannigan, formerly in the wheat pit for Wrightman & Neafus, has taken Mr. Wing's position with Pringle, Fitch & Rankin.

A. W. Goetz of Milwaukee, who has gone with the Van Dusen-Harrington Co. of Minneapolis to become manager of the latter company's barley department, was the guest of honor at a dinner given by his associates on the Milwaukee exchange prior to his departure for his new home. Mr. Goetz was for many years with F. Kraus & Co., of Milwaukee.

At a directors' meeting of the Way-Johnson-Lee Co., held in the office of the company in Minneapolis, Minn., on September 6, R. P. Johnson was elected president to succeed T. A. Way, resigned, and M. W. Lee, vice-president in place of Mr. Johnson. Mr. Way has disposed of his interest in the Way-Johnson-Lee Co. to the other stockholders.

The Hadden Commission Co., which succeeded the defunct Hadden-Rodee Co. of Milwaukee, has been absorbed by B. W. Frank & Co. of that city. The latter firm has taken over the wires and offices of the Hadden company and will do business in the latter concern's former quarters. E. G. Hadden, formerly president of the Hadden-Rodee Co., and its chief stockholder, has become office manager for B. W. Frank & Co. The old Hadden-Rodee Commission Co. went into the hands of a receiver July 9 as the result of the Woodend failure in New York, through which they were heavily embarrassed. The appointment of the receiver was preceded by a stormy session of the stockholders at which E. L. Bradbury, the chairman of the board of directors, was asked for his resignation. He left immediately afterward for Chicago and has had no connection with the Hadden Commission Co., although he is said to have held a large block of stock in the old company. Shortly after that time occurred the organization of the company which has now ceased to exist, with E. G. Hadden at its head and E. A. Kennedy, secretary and treasurer.

OUR CALLERS

[We have received calls from the following gentlemen prominently connected with the grain and elevator interests during the month.]

W. L. Penney, Peoria, Ill.
W. Brown, Albion, Mich.
T. H. Hyslop, Ovid, Mich.
Robert Frazer, Warren, Ohio.
John Howitt, Waukesha, Wis.
Heinrich Kellner, Rossitz, Austria.
F. G. Adamson of Stephens-Adamson Mfg. Co., Aurora, Ill.

G. M. Robinson, president Charter Gas Engine Co., Sterling, Ill.

F. L. Cranson, secretary Huntley Mfg. Co., Silver Creek, N. Y.

E. A. Ordway, Kansas City, Mo., representing Invincible Grain Cleaner Co., Silver Creek, N. Y.

Up to about September 1 the Chicago grain handlers started over 1,000,000 bushels of Pacific Coast wheat in this direction this season; while the Minneapolis interests have brought more than double that quantity to their millers and for interior distribution.

THE EXCHANGES

A rice exchange has been established at Beaumont, Texas.

Preliminary steps have been taken to organize a grain exchange at Tacoma, Wash.

Two Chicago Board of Trade memberships have been sold recently at \$3,450 net to the buyer.

Minneapolis Chamber of Commerce memberships have lately sold at \$450 and \$500 net to the buyer.

The directors of the Milwaukee Chamber of Commerce are considering an amendment providing for the appointment of an official sampler.

The Electric, Dakota, Great Eastern and Mutual elevators at Buffalo have been made regular for the storage of grain deliverable on New York contracts.

The directors of the Indianapolis Board of Trade have been compelled to postpone the erection of a new building, owing to the inability to secure a loan of \$125,000.

Members of the Minneapolis Chamber of Commerce are considering the advisability of making No. 2 Northern wheat deliverable on contracts at a discount of 5 cents.

Calumet Elevator B at South Chicago, a Bartlett-Frazier house, and the Union Elevator, leased by the Harris-Scotten Co., have been made regular by the directors of the Chicago Board of Trade.

A. W. Goetz Jr. has resigned as a member of the supervisors of grain inspection and weighing at the Milwaukee Chamber of Commerce and has been succeeded by W. H. Manegold. Mr. Goetz has removed to Minneapolis.

The contract for the new Chamber of Commerce building at Baltimore provides that the structure shall be ready for occupancy in about eight months. The building will have a number of conveniences not in the old structure.

The directorate of the Chicago Board of Trade has approved of a new rule giving the secretary power in his discretion to extend the time of delivery on the closing day of the month. The rule has been posted for ballot.

The New Orleans Board of Trade has appointed a standing committee of grain exporters and ship agents to investigate the freight rates and transportation charges of several railroads carrying grain from the Northwest and Middle North to New Orleans. The purpose is to head off any discrimination in favor of other ports.

A special committee, composed of John T. Sickel, George W. Patton, B. A. Eckhart, George E. Marcy and E. S. Merritt, has been appointed by the transportation committee of the Chicago Board of Trade to call attention of the executive officers of the railroads in Chicago to the unjust discriminations that now exist against this market.

The grain committee of the Chicago Board of Trade and the chief officials of the inspection department have decided on type samples for governing inspection of No. 2 red and No. 2 hard wheat, standard oats, and No. 2 rye. The samples of wheat are in line with those of last year; of oats and rye the standard is a shade higher.

Edward S. Layman and A. E. Schuyler, who composed a committee, which, in conjunction with employees of the weighing department of the Chicago Board of Trade, made an examination of the grain stocks in Chicago elevators and compared them with outstanding warehouse receipts, reported to the directors that the grain and flaxseed in regular houses is represented by warehouse receipts.

The members of the Milwaukee Chamber of Commerce have adopted the following amendment to the rules, thus establishing a contract grade for oats: All contracts for the purchase or sale of oats in this market unless otherwise specified, and except as provided in Sec. 1 of this rule as to Chicago warehouse receipts, shall be understood to be for No. 1 white oats, old or new, test weight 34 pounds, and this grade shall be deliverable in fulfillment of such contracts.

NEW EXCHANGE AT WINNIPEG.

According to advices from Winnipeg, plans are under way to establish a new grain exchange in that city to be independent of the Winnipeg Grain Exchange, the premier exchange of the Canadian West. It is understood that a meeting was recently held when the question was thoroughly gone into and a sufficient number of grain men and other business men agreed to become members of the new organization. About 30 gentlemen or more are now on the membership list and it is expected that this number will soon be augmented to the

extent of nearly 100 more, including grain men and farmers throughout the province. Application for a charter has been made and the work of organization is being actively pushed. It is expected that the new exchange will be in full running order within a short time.

CLEARING HOUSE PROPOSED.

At a meeting of the grain trade section of the New York Produce Exchange, held on August 31, the advisability of establishing a clearing house for grain trades was discussed. It was suggested that a system similar to the one now in use at Minneapolis be put into operation. No vote was taken on the subject, but it was finally decided to appoint a special committee of five members to confer with the committee on grain commission rules, and report at a future meeting. From the expression of opinions by the members present, the sentiment seemed to be in favor of establishing a clearing house.

INSPECTION AT CHICAGO.

The directors of the Chicago Board of Trade have approved the amendments to the regulations governing the department of grain sampling and seed inspection, recommending that the grain committee arrange with the state grain inspection department for the appointment of helpers to secure samples of every lot of grain graded by the department in Chicago, as far as practicable.

It is proposed that the helpers shall be subject to control and discharge by the state grain department, appointed on recommendation of the grain committee, and their salaries paid by the department, with money furnished, if necessary, by the Board of Trade. The helpers are to bring samples of graded grain to the chief sampler's office, and the identity of samples to be known only to the state department and to the official sampler. In case any party at interest should complain of improper grading to the state department and fail to have his complaint considered it is proposed the grain committee listen to his complaint and, if it is in their judgment reasonable, the matter be taken up by the grain committee with the state department, all parties at interest being given an opportunity to be present at such hearing.

CROP REPORTS

The Indiana corn crop will be safe from frost by September 15 to 25.

The corn crop of Western New York will not be 25 per cent of a normal yield.

The Kentucky report says that wheat is 80 per cent of a full crop, and oats 87 per cent of a crop. Although Montana wheat is a short crop the quality is good, much of the new wheat grading No. 1.

Reports on Texas corn are enthusiastic, the estimates ranging from 150,000,000 to 200,000,000 bushels. The crop is made.

Ex-Senator Washburn estimates the world's wheat shortage at 200,000,000 bushels. He believes that wheat will go to \$1.20 or higher.

The Ontario crop report, making the smallest total yield on record, attributes the loss to winter killing and to the ravages of Hessian fly.

Corn in New England promises a large crop. Oats have been cut and thrashing is in progress. Rye seedling has begun in some sections.

T. W. Cook, writing from Scotia, Neb., says: "Crops very good in Greely County, Neb., and elevators are busy. Fine corn crop in sight."

R. J. Turner, commissioner of agriculture and labor of North Dakota, believes the wheat yield of the state will approximate 60,000,000 bushels.

Secretary Smiley of the Kansas Grain Dealers' Association is quoted as saying that the wheat crop of the state will not exceed 53,000,000 bushels.

Prof. M. I. Bolley, of the Agricultural College at Fargo, estimates the wheat yield of North Dakota at 9 to 12 bushels to the acre on the total acreage.

Reports to Burlington officials on corn in Nebraska indicate that unless there is frost damage the state will have 15 to 20 per cent more corn than last year.

The corn crop in Oklahoma and Indian Territory is large. Late corn has matured generally, although some of the crop suffered on account of lack of moisture.

The Minneapolis Market Record estimates the wheat crop of the Northwest at 158,000,000 bushels and allows 2½ per cent in Minnesota, 3 per cent in South Dakota and 4 per cent in North Dakota for abandoned acreage. The average yields reported

are 14 bushels in Minnesota, 12.4 bushels in North Dakota and 9.2 bushels in South Dakota.

Macaroni wheat in some sections of Colorado is going from 40 to 50 bushels to the acre.

Jones estimates the wheat crop of Manitoba and the Northwest Territories at 42,000,000 bushels. Canadian authorities have quite generally taken exception to these figures.

The Missouri state report makes the wheat crop 26,700,000 bushels. The condition of corn is placed at 75, against 73 a month ago and 77 for the corresponding period last year.

B. R. Neal, of the Texas Grain Growers' Association, states the total wheat crop of Texas will not be over 8,000,000 or 10,000,000 bushels, against some 15,000,000 bushels last year.

The South Dakota report, dated August 31, stated that corn had made good progress but was still somewhat backward. Flax cutting was in progress, with good yields and quality indicated.

The Illinois report says that a general and decided improvement in corn is noted. The crop is in a condition to mature rapidly. Oats have yielded well, but wheat is poor in quality and yield.

Secretary True of the Wisconsin State Board of Agriculture reports that the weather has been too cool for corn. The present prospect is 75 per cent of a crop. Oats condition is 88, as compared with 98 a month ago.

A. C. Heath, manager of the oatmeal mill at Fort Dodge, Iowa, says that the oats crop over the northern and western part of the state is better than usual in quality and quantity. In confirmation of this, the crop on one farm measured 60 bushels to the acre when thrashed, but proved 80 bushels to the acre by the test of weight.

The crop report issued by the Northern Pacific says that wheat in the Northwest has been quite generally damaged by rust. Barley, oats and flax are reported to be in good condition with the prospects for a heavy crop. In some places thrashing is in progress and the yield of barley and oats is reported to be thirty to forty bushels an acre. Corn has generally improved, although in some localities rain and cold weather have retarded the growth.

The commercial editor of the Portland (Ore.) Oregonian estimates the wheat crop of Washington, Oregon and Idaho at 45,100,000 bushels. This compares with a crop of 34,785,000 bushels last year, 41,600,000 bushels in 1902, and 46,600,000 in 1901—the latter being the record crop for the three states. The estimate is fully 5,000,000 bushels under the yield indicated a short time before harvest, the decrease being due to dry weather and frost. The acreage is larger than ever before.

A comparison of the estimates of some of the leading crop experts is interesting. Jones places the wheat crop at 504,000,000 bushels, giving Minnesota and North and South Dakota 128,000,000 bushels of spring wheat and 10,000,000 bushels of the macaroni variety; Snow estimates the crop at little more than 500,000,000 bushels; Chief Statistician Lisle of the New York Produce Exchange puts the crop at 583,000,000 bushels, while John Inglis of Chicago figures on a total of 516,000,000 bushels.

"Corn cutting has begun in the extreme South," says the Ohio state report dated September 5. "The weather has been favorable for corn during the past week, and there has been a decided improvement in most places. There are many fields of excellent corn, but on the other hand there are many fields that will not make more than one-half to two-thirds of a crop. The earliest corn will be ready to cut within the next week or two; the latest will not be safe from frost for two or three weeks, and in places four weeks will be needed."

Director J. R. Sage, of the Iowa crop bureau, still estimates the state's corn crop at 500,000,000 bushels. The state report dated September 5 says in part: "As a whole the corn crop has done fairly well during the week. The progress of the crop toward maturity has been more uneven than usual in the same localities and in the same fields. Reports from all sources confirm the previous statement that two-thirds or more of the corn crop will need normally warm weather till the close of September to be safe from damage by killing frost. The more advanced fields show signs of earlier maturity. Fall plowing is being pushed."

Reports from 500 different points in the corn belt have been received by George H. Phillips. In Ohio half of the state will have 50 per cent of a crop and the other half a full crop. Two-thirds of Indiana have 50 per cent of a crop and the balance a big crop, the loss being due entirely to drought and cool weather. In Illinois one-fifth of the state has suffered from drought, while the balance has a full crop. Iowa has more than an average crop, only a few points reporting prospects poor, and they are where the corn is late. Nebraska has a bumper crop. Missouri 75 per cent of an average crop. In Kansas the eastern part of the state is poor, but the central and western part has a big crop, and the state will have about 75 per

cent of an average crop. Reports from Wisconsin, Minnesota and South Dakota are favorable for a big crop, with a late frost.

Snow estimates the corn crop at 2,350,000,000 bushels, compared with 2,240,000,000 bushels in 1903. He does not believe the present condition is very much higher than it was at this time last year. Killing frosts earlier than the third week in September would cause these figures to be reduced.

The Kansas State Board of Agriculture on September 2 issued a bulletin giving the acreage and yield of winter wheat and the condition and acreage of the growing corn. The report is based on statements made by dozens of wheat growers in every township. The yield of wheat for the present year is given as 63,421,156 bushels, or an average of less than eleven bushels an acre for the 5,816,395 acres sown. While the yield is 32 per cent smaller than that of last year, which broke the record for the yield of any state, it is greater than the average yearly yield for the last ten years. Seventy per cent is reported to be good grain. The corn area of the state is reported as 6,492,521 acres, and the present average condition is given as 65 per cent. The condition is no better than it was a year ago, and the acreage little greater than a year ago. No estimate is made of the probable corn yield.

The monthly report of the chief of the bureau of statistics of the Department of Agriculture shows the condition of corn on September 1 to have been 84.6, as compared with 87.3 last month, 80.1 on September 1, 1903, and a ten-year average of 79.6. The following table shows for each of the states having one million acres or upward in corn the condition on September 1 in each of the last two years, and that on August 1, 1904, with the ten-year September averages:

States.	Sept. 1, 1904.	Aug. 1, 1904.	Sept. 1, 1903.	Ten-year Average.
Illinois.....	86	89	77	84
Iowa.....	85	87	67	79
Kansas.....	68	70	72	68
Nabaska.....	87	88	80	70
Missouri.....	74	74	76	80
Texas.....	86	89	91	75
Indiana.....	80	91	76	87
Georgia.....	91	89	89	87
Tennessee.....	90	96	91	83
Kentucky.....	89	95	81	84
Ohio.....	78	86	67	84
Alabama.....	93	93	99	84
North Carolina.....	96	96	86	87
Arkansas.....	87	91	90	79
Mississippi.....	92	95	98	81
Virginia.....	98	97	88	87
South Carolina.....	91	93	83	83
South Dakota.....	80	86	89	75
Indian Territory.....	92	93	84	86
Oklahoma.....	87	89	72	62
Wisconsin.....	78	84	72	84
Pennsylvania.....	94	90	79	86
Minnesota.....	80	80	73	85
Louisiana.....	87	90	99	85
Michigan.....	73	75	79	82
United States.....	84.6	87.3	80.1	79.6

The average condition of spring wheat was 66.2. This being the first time that spring wheat has been separately reported upon on September 1, the only comparison that can be made is with the condition one month ago, which was 87.5. The condition in the five principal states is reported as follows: Minnesota 69, North Dakota 63, South Dakota 56, Iowa 66, and Washington 80, a decline during the month of 23, 27, 29, 14 and 1 points, respectively.

The average condition of the oat crop on September 1 was 85.6, against 86.6 last month, 75.7 on September 1, 1903, and a ten-year September average of 80.6. The following table shows for each of the ten principal oat states the condition on September 1 in each of the last two years, and that on August 1, 1904, with the ten-year September averages:

States.	Sept. 1, 1904.	Aug. 1, 1904.	Sept. 1, 1903.	Ten-year Average.
Illinois.....	82	81	70	80
Iowa.....	87	87	67	80
Wisconsin.....	88	93	81	88
Minnesota.....	92	95	79	86
Nebraska.....	82	80	79	71
New York.....	96	96	95	86
Pennsylvania.....	98	97	83	84
Indiana.....	92	93	85	85
Ohio.....	100	99	78	85
Kansas.....	52	58	62	64
United States.....	85.6	86.6	75.7	80.6

The average condition of barley on September 1 was 87.4, against 88.1 on August 1, 1904, 82.1 on September 1, 1903, and a ten-year average of 82.1. The average condition of rye on September 1 was 86.9, against 84.1 on September 1, 1903, and a ten-year average of 85.8. The average condition of flax on September 1 was 85.8, as compared with 78.9 one month ago and 80.5 on September 1, 1903. Of the thirteen principal clover-seed-producing states, four, namely, Wisconsin, Colorado, Utah and California, report increased acreages, while all the other principal states report decreases. In Indiana, Iowa and Colorado conditions are below their ten-year averages, while all other principal states report conditions above such average.

GRAIN IMPROVEMENT.

[The report of J. L. McCaull of Minneapolis, chairman of the Committee on Grain Improvement, at the annual meeting of the Grain Dealers' National Association at Milwaukee, Wis., on June 23, 1904.]

Your committee on grain improvement, possessing a few ideas of its own, has purloined many from others and pleads at the outset intense earnestness and unbounded enthusiasm as excuses, should any be necessary, for the strenuous and "meat-ax manner" in which its subject may be handled.

There prevails in some localities a feeling that the average grain dealer measures each man and considers each locality purely from the standpoint of revenue; that he is narrow in his views and supremely selfish in his dealings with his fellow men; that his stock of patriotism is so meager as to include only the first person.

While such an arraignment is too often justifiable, we contend that the average grain dealer is broadminded, is patriotic and reasonably liberal and generous.

He is in fact the "easy mark" at which are directed nearly every form of "hold up" known to the canvassing and soliciting fraternity.

Mostly out of generosity, but often through fear of loss of prestige, he subscribes to every form of benefaction under the sun. His voluntary and involuntary subscriptions embrace the lazy pestiferous tramp and the stricken orphans and widows, the foreign missions and the agnostic organizations. A thousand worthy and ten thousand unworthy methods of depleting his bank account are practiced upon him with more or less success to the practitioners. He forwards by verbal and financial encouragement every laudable and many detestable movements. By dint of strict economy in personal expenditures he assists in boosting along many important enterprises and aids in many developments that work for the general good. He willingly or otherwise pays taxes that improve rivers and harbors—dig canals—erect splendid government buildings and carry on stupendous public enterprises all to the general good and the incidental profit of the politician.

He assists in educating the benighted Asiatics, pretending to fear the "Yellow Peril." He helps to feed an indigent treacherous redskin and his numerous progeny. He helps to build libraries he may never enter, he subscribes to scientific developments that affect almost every line of business—save and excepting one, the grain business.

He has assisted in the development of many new enterprises—has been no small factor in the general improvement that has attended nearly all forms of production and commerce and at the same time continued to play back and forth in the narrow groove which was years ago hewn out by main strength to meet the then existing conditions.

While his dollars have contributed to the welfare of scores of enterprises and institutions, he has continued to look to the same old weedy, poorly tilled and deteriorating acres for his precarious income.

While subscribing to scientific research in distant fields (and occasionally in mining fields) he has witnessed with considerable alarm the decreasing grain yields and the increasing competition, he has "cussed" the slovenly farming and damned his new competitors, never dreaming that he might become an important factor in wresting from nature a double portion of desirable stores.

Economies in his business methods have been rigidly followed—expensive appliances have been adopted—freight rates have been vigorously contested—but the one great effort that can be put forth by every man in the trade with absolute assurance of profit to producer, merchant, manufacturer and consumer has been too generally neglected.

This one movement that may be made universal is none other than the encouraging and promotion of all efforts toward grain improvement.

An incidental result will be the closer union of the farmer and the merchant and the obliteration of such remnants of animosity as may still obtain towards certain members of the trade.

No man is better qualified than is the grain merchant to remove the scales of prejudice from the eyes of the farmers and enable them to hold the great virtues and the intensely practical workings of the splendid agricultural colleges and experimental stations which all classes of citizens are willing or unwillingly supporting.

The foregoing is based upon the assumption that the grain dealer is himself sufficiently wide awake to grasp the problem and appreciate its advantages. We regret to state that this wide-awake condition is not particularly manifested by the large number of persons engaged in our branch of business, but daily, monthly and yearly new recruits are being added to the ranks of converts and co-workers.

We of the Middle West may appear to the uninitiated somewhat egotistical in thinking that we are the center of effort in the direction of grain im-

provement. We believe the results justify our pride, and if other sections of this great country can show equal or better work we are here to applaud and not to depreciate.

Your committee has had opportunity of observing more closely the good work accomplished in this direction in the states of Iowa and Minnesota. These states—and we doubt not many others—are extremely fortunate in having well established, generously endowed and magnificently managed agricultural colleges and experimental stations.

Your committee at the outset declares itself unhesitatingly, unqualifiedly and without mental reservation whatsoever in sympathy with and heartily endorsing the great work that these institutions, and those of their kind, are doing, and it is only justice to the grain dealers' associations in those states to say that these associations fully appreciate the good work referred to and are doing all in their power to encourage and forward it.

As before stated, your committee, being more familiar with the work of these states, will be pardoned, if pardon is necessary, for referring directly to them, not wishing for one moment to detract from what may have been accomplished in other localities.

The writer can testify from personal experience that less than twenty years ago, in what is today one of the greatest agricultural institutions in the world, the agricultural course was almost discredited; the few individuals who, by reason of ability, persistency and combativeness, continued in their pursuit of knowledge in this particular line and who to-day stand pre-eminently in the front ranks of all those engaged in such research, could add to this testimony were it necessary.

As an evidence of greatly changed and improved conditions, we cite the achievements of these same individuals who have adopted this line of investigation and promotion for their life work.

Within a decade these two institutions have developed from a very ordinary, if not to say sluggish, state into institutions intensely thorough in their research and unquestionably practical in their applications.

Time will not permit more than brief mention of the many laudable efforts being put forth along these practical lines.

In Iowa in addition to the general education in agriculture, there has been developed most wonderful results in stock breeding and particularly in plant breeding.

Competent and progressive men in charge of this work, not being satisfied with merely stuffing a student with facts undigested, and thrusting him with his sheepskin upon a defenseless community, have made every detail of their instruction coordinate with practical application. Brains and blisters are there, daily associates. A graduate of to-day can boast of deeds along with diplomas.

Not satisfied with instructing the young, those in charge of the work conceived the very commendable idea of inviting the farmers themselves to what is known as a short course work in stock and grain judging. This school of instruction is held at the most favorable time for the farmers to attend, lasting for about two weeks, and sessions continue from eight in the morning until ten at night. Very practical lectures are given. The farmers themselves engage in the discussions and the grain judging. The outgrowth of these meetings was the organization of the Iowa Corn Growers' Association, covering all parts of state, having strong local organizations, offering prizes for the best results in grain growing and grain judging. The attendance at the short course, originally small, has increased until now over one thousand attend, and the limit of present facilities for caring for and instructing such a gathering has already been reached. By their attendance upon and their great interest manifested in the work of such a course the most practical and necessarily the most prudent men of our land stamp their approval upon it.

Passing beyond the state agricultural institutions, several of the counties have adopted the plan of converting their poor farms into experimental stations. And right at this juncture your committee desires to utter its most emphatic indorsement. It should require but a mere statement of such an innovation to arouse the enthusiasm of every good citizen.

The conception that has thus changed a field of bitterness, sorrow and reproach into one of interest, contentment and educational advancement must, to say the least, have been inspired by the Almighty.

The state associations of grain dealers have augmented the work very materially by a general distribution of pertinent literature bearing directly upon grain improvement. Along with the general mails to the members of the Association, have been sent attractive circulars and pamphlets for distribution among the farmers by the grain dealers. Prizes have been offered by the Grain Dealers' Association; plans for distribution of desirable seeds have been carried out; local institutes organized and encouraged.

A most commendable work was instigated by the Grain Dealers' Association of Iowa in the running of special trains over various roads in the state carrying professors and others qualified to discuss intelligently the question of seed grains. The trains made frequent stops at previously arranged points where enthusiastic groups of farmers were given practical instruction in the selection of seeds and planting the same. The railroads of the state, realizing the benefit to be derived from such practical work, very liberally contributed the train and train service.

The Iowa State Association has taken no small part in the matter of legislation so far as it affects the agricultural and experimental interests of the state. They have declared themselves as unqualifiedly in favor of all rational expenditure in this direction. It has become a very prominent factor in state politics with but one end in view, namely, promotion of the general and not individual welfare. It has, in a large measure, overcome the prejudice of the press, and is particularly allied with the farm journals and other agricultural publications, as their interests are undeniably one and the same.

Fifteen years ago the Minnesota Experiment Station began the improvement of wheat and later of other grain crops. Hundreds of varieties were secured from all wheat-growing sections of the world. After a few years of trial none of these was found superior to those already grown in the state, excepting possibly one variety of barley and one variety of wheat. The station's attention was then turned to improving the best varieties of wheat obtainable. Fife and blue stem wheat were almost universally grown; only a few varieties of oats made up the bulk of that crop, while six-rowed Mansbury barley had nearly the exclusive field, and Russian (called common) flax, was the only variety of that crop in use. These varieties and the best obtainable stocks newly introduced were used as a basis from which to make new varieties by breeding. The best varieties of forage and root and fiber crops were also brought under a system of improvement. Methods of plant breeding have been gradually evolved, and the breeding of field crops is now carried on in the Minnesota Experiment Station with as much system, with as keen foresight of the needs for the products, and with as much care and patience as is exercised in our best manufacturing establishments. The best old or new varieties are the raw product, and from these are created by a system of selection, or by hybridizing followed by rigid selection, new products worth millions of dollars. Products already turned out are as follows: "Minn. No. 163" wheat, distributed in 1899, of which it is estimated over 300,000 acres are now growing; "Minn. No. 169" wheat, distributed in 1902, of which it is estimated 75,000 acres have been planted this spring; "Minn. No. 13" corn, distributed annually since 1897, of which it is estimated there is now growing over a quarter of a million acres. The station authorities have figures showing that these three pedigreed varieties are yielding at least a dollar per acre more than the common varieties they are displacing, adding to the value of the farmer's crops more than half a million dollars in 1904. Results already achieved and new varieties now in hand warrant the belief that from this breeding alone ten per cent can be added to the value of the grain crops of the state. This modest percentage of increase would add ten millions of dollars annually to the income of our farms, transportation companies, dealers and manufacturers.

With modest appropriations for this work methods of breeding all the staple crops have been worked out; the pedigreed varieties above mentioned have been originated and widely distributed; thousands of other newly originated varieties are under trial; under the auspices of the secretary of agriculture cooperative relations have been inaugurated with the state experiment stations of North Dakota, South Dakota, Iowa and Wisconsin, and numerous young men have been trained, some of whom are employed in other state experimental stations doing similar work for their respective states. Thus has been started with government and state funds a unique and potent agency for building up agriculture and its dependent industries. The experiment station, the college of agriculture, the farmers' institutes, the agricultural press, the state fair and similar agencies are moving in another direction also to improve our grain crops. They are working out systems of farm management and crop rotation which provide that the field be prepared for the grain crop, both by the crop previously grown and by means of manures made from crops grown for live stock on a large part of the farm. It does not seem too much to hope that the better methods of farm management our wheat average can be run up from 14 to 20 bushels per acre and that by breeding it can be pushed on up to 25 bushels or within seven bushels of the average yield in England, where the use of winter wheats makes still larger yields possible. Other crops are being proportionately improved.

These experiment stations have devised the methods and machinery for improving our crops. It is now left to the state and national legislatures to provide the money with which to do the work in quantity to meet the requirements. This Association should join with the various farmers' organizations in securing ample funds with which to secure lands, buildings, labor and other necessary expenses now inadequately supplied.

The grain dealers' associations in the states referred to are not alone in their interests in the work, as nearly all the railroads in that territory, particularly the C. & N. W., C., R. I. & P., C., B. & Q., C., M. & St. P. and the Iowa Falls & Northern, have very cordially cooperated in several practical and substantial ways. Grain and stock, for the purpose of instruction, have been very frequently transported free of all charge, and many other instances might be enumerated of substantial encouragement, among them excursions at low rates from all points of the state to the agricultural colleges and experimental stations, enabling thousands of farmers to become intimately acquainted with work of which they previously possessed but a confused and limited comprehension. Small wonder that the railroads of the state of Iowa should assume such a progressive attitude when they realize the substantial returns to them of a probable increase in the Iowa corn crop of 40 million bushels, the direct result of better methods of farming.

It is estimated that the damage to the oat crop of Iowa in the year 1903, by reason of inferior seed, resulting in a preponderance of smut, reached the enormous total of one and one-half million dollars.

In this connection we deem it proper to call attention to the fact that appearances of seed grain are often very deceptive and that in this respect like does not always produce like. There are pedigreed grains as well as pedigreed live stock, and good breeding is as essential in the one case as in the other. It should be the policy of the grain dealers of this country to secure for the farmers from our experimental stations reliable pedigreed seeds. We believe that strenuous efforts should be made by the grain dealers' association and by the national organization to prevail upon the leading seed houses of the country to handle pedigreed seeds and seeds adapted to the localities in which they will be used. It is a well known fact that yearly hundreds of thousands of bushels of attractive seeds are distributed throughout the country, at high prices, that are wholly unfitted for the requirements of the localities to which they are sent. The seed dealers of this country are not, in our opinion, responsible for this condition, for until comparatively recent years the breeding of seed grains was not seriously considered and farmers were attracted wholly by the appearances of seeds offered.

We believe that when the value of carefully selected seed grains becomes more generally understood and the demand for such becomes more universal, the great seed houses of the country will very rapidly and very willingly cooperate with the grain dealers in promoting the work.

It is greatly to be hoped that the local grain dealer wherever found will do all in his power to assist the farmers in securing desirable seed and will facilitate the work by proper cleaning appliances and will urge the necessary treatment for the extermination of smut and other infections.

We feel each state organization and local organization should invite leading men in experimental work to deliver frequent addresses to the farmers and that the attendance of farmers at grain dealers' meetings should be encouraged, to the end that a better understanding and greater harmony may prevail. Such measures will certainly eradicate the feeling that we are an institution living unto ourselves.

We strongly recommend that at each gathering of the National Association a portion of the program shall consist of an address upon experimental work by some prominent and competent authority.

We believe that grain should be purchased with more regard to excellence than is at present manifested in many quarters. Where choice grains are grown better prices should prevail than for ordinary and inferior grains. We cite the common practice of bidding for "No. 3 corn or better" as one not calculated to encourage the raising of No. 2 corn. We believe that the grain buyers are as much or more in need of enlightenment on the question of qualities and values than the farmers themselves, and a proper discrimination by the grain dealers will be a wonderful incentive to better efforts on the part of the farmers.

We have said much in this report about the efficient work of our agricultural colleges and experimental stations. We believe that their usefulness can be enlarged by giving instructions in the proper judging of grain from an analytical standpoint and that they should encourage research along this particular line with the hope that still greater discoveries may be made. These institutions should furnish opportunity for those who may contemplate handling grain to become familiar

with the merits of the different grains and be thereby able to judge upon its merits and not wholly upon appearances.

We strongly recommend that a grain judging contest be inaugurated in connection with the International Live Stock Exposition held in Chicago each year and that the grain dealers offer prizes in connection with such contests. We recommend that an executive committee of six, to have full charge of such grain judging contest in connection with the Live Stock Exposition to be held in Chicago in December, 1904, be appointed by the incoming president of the Grain Dealers' National Association. The exhibition of grain at that time should embrace all kinds and breeds of grain grown in the United States. The secretaries of each state organization should comprise a committee for selecting the various samples of grain referred to. The executive committee should have power to select a suitable superintendent, whose duty it shall be not only to arrange for the display of grain and for the awarding of prizes, but also to distribute pertinent literature.

We recommend that the presidents of the various state associations shall constitute the finance committee, who shall have charge of the finances of the proposed exhibition.

Your committee indorses the congressional appropriation for the World's Fair display at St. Louis, and heartily indorses the department of agriculture. We commend Secretary Wilson's earnest work and point particularly to the fact that he has caused to be raised in heretofore imported. That, as a result of not only has there been a great improvement in American live stock, American fruits and forestry, but also a very marked increase in the yields of grain.

We believe it the duty of every grain man to make consistent effort toward the promotion of all legislation that may favorably affect the state institutions to which we have referred and the national department of agriculture.

Each year adds to the manifestations of deep interest in this subject by business men and the press throughout the country. We contend that we who are so vitally interested should not for a moment become less interested than are those in other walks of life. Bankers, professional men and manufacturers of agricultural implements have demonstrated from time to time their great interest in this work, and it is therefore to be hoped that grain men may be equally progressive.

It is assumed that a large number of grain men will become aggressively active in promoting this work. It is to be hoped that those who cannot become aggressors, and we trust their numbers will be small, will, at least, be negative supporters of our efforts and adopt the following half dozen precepts:

1. Let us not lose sight of the fact that the limit of the producing area is soon to be reached—while increasing population and increasing competition are absolute certainties. We have therefore but one refuge, viz., wresting from nature the limit of production per acre.

2. Let us not procrastinate, lulling ourselves by that thought that the critical hour is yet far distant; dodging the problems of to-day—and we contend this is a problem of to-day—bespeaks cowardice.

3. Let us not overlook or underestimate the fact that by cordial and substantial support of our agricultural colleges and experimental stations we produce the maximum results with the minimum of effort. Centralized and competent forces surpass diversified and random efforts.

4. Let us not leave all the work to the educational institutions; do some thinking of our own. Talking and working will increase our own zeal and add converts to the ranks and dollars to our bank accounts.

5. Let us not confine association work to the narrow lines of producing instantaneous financial results.

6. Let us not stand in wide-eyed wonder and admiration of innovations, inventions and improvements in all other lines, while we grumble at, discourage and resist all efforts to establish in our own business some methods that may not boast of a birth previous to the Civil War.

CORN OIL.

Oil, said to be superior to linseed oil for mixing paints, is now extracted from corn. Heretofore crude oil has been obtained by pressure, but the latest method is to extract it by what is known as the solvent process, as employed at the new corn-oil mill at Decatur, Ill., the only one of its kind in the country.

The process is simple in theory, but somewhat complicated in application, says the Country Gentleman. The solvent used is a light oil subject to evaporation. The oil-bearing portions of the corn are steeped in the solvent, which takes up the corn oil. The solvent is then drawn from the bottom of the tank, in which this part of the process takes place. The two oils are separated by dis-

tillation. The corn oil is passed through filter presses to remove particles of starch or other foreign matter and is then ready for the market. The solvent is condensed and carried back to the storage tank, to be used again. The corn from which the oil has been extracted is steamed, and is then ready for the market as a feed.

The process of separating this oil from the corn is similar to that of separating sugar from beets, the difference being in the solvent used. The stock feed is not entirely devoid of oil. Enough is left to make it 1 per cent oil, which it is claimed is a sufficient ratio of oil in a well-balanced feed. This feed is not in the form of a cake as it comes from the linseed oil mills, but is in the shape of a dry meal, partly cooked and partly digested.

It is claimed by dealers that the demand for corn oil is increasing each year. This is the more notable in the face of a barely stationary trade in some of the old established oils. The oil brings 3½ to 4 cents per pound, and its more general use will mean another avenue for the disposition of America's leading crop.

WAGNER ON CORN.

When corn was from 53 to 56 cents for the different months, Europe was terribly "short of fodder" and export orders were brisk. Two weeks ago our "crop was firing;" rain came, then the "nights were cold," and corn was "not looking well;" and "perfect weather was needed till October" to mature the crop. The press could find nothing anywhere, but bull news everywhere. These letters declared to the contrary and cautioned you strongly not to buy corn above 50 cents for the new crop futures. In my letter of the 22d you will find these words: "Complaints are not general and seem to be faint. The movement is increasing; the acceptance of offers on corn by exporters argues there is more for sale than the home market will take at present prices. Would feel more bullish on corn if such offers were rejected. Can see nothing for those who sell it on talk scares and bulges but quick profits of moderate size." We all know now what has happened. Corn is down four to five cents. Everyone now says "corn looks magnificent," the "crop is enormous," the "exporters are filled up." One report says "foreigners are selling corn in the Chicago market;" the "shortage of fodder in Europe" is all forgotten; everyone wants some of the "pigeon pie" and is anxious to sell corn short before the price gets to 40 cents. That is the price some now talk for May corn. You may rest assured the corn market is soon going to be oversold. Let the sellers run their course, but get yourself in a frame of mind that will enable you to take hold on the long side at the proper time. The mistake of the bears in the grain market for several years has been that they do not pay sufficient attention to the temper of the farmer. You will not see cheap corn; 40 cents is not so very low, but you will not see it this year, and are not likely to see it next year. It is not probable enough to figure on. Do not be deceived; you may see the crop escape "firing"; you may know it has dodged a "frost"; you may feel sure "it is a record-breaking crop;" but before we see old-time cheap corn we will many a time settle with the farmer. He controls the price. He has watched the Rockefeller, the Carnegies, the Havemeyers, the Vanderbilts, the Goulds, the Harrimans and the Hills, and from them he has learned to run his own agricultural trust with excellent results to himself. It was he who sold the corn when it was high, that is coming in now to break the market. It will be he who, when it gets low, will stop selling it and put the price up again. Corn will rest a long time in the farmer's cribs before we see real cheap corn again. When there is too much in his cribs we shall hear more of a reduced acreage than a low price. He has seen the folly of overproduction and hasty overselling. Get yourself in step with him. Take advantage of a selling craze in corn when it comes and buy it. Follow the farmer, not the "pit traders." When the blind lead the blind, both will fall in the "pit."—E. W. Wagner's Letter of August 30.

Commissioner of Agriculture Koiner of Maryland recently received a letter from K. B. Stoner of Fincastle, Botetourt County, in which the writer tells of a wonderful yield made this year from a single grain of wheat. Mr. Stoner writes that the plant made one hundred and forty-two heads, with three grains to the mesh, but that owing to rust, caused by having covered the wheat too closely with netting to prevent the sparrows from destroying the heads, only two grains formed to the mesh, and eighty heads matured. These produced, after loss by birds, 2,500 grains of matured kernels of wheat. Had the rust not affected the other heads, there would have been 6,000 grains produced from the one grain planted.

FIRES--CASUALTIES

The American Malting Co.'s elevator at Goodhue, Minn., was burned to the ground on the night of August 28.

The Central Granaries Co.'s elevator at Graf, Neb., was damaged by fire of unknown origin to the extent of \$250 on August 26.

A small fire in the Martin Elevator at Minneapolis, Minn., on August 27, was extinguished before much damage was done.

Elmer Marks, a five-year-old boy, was smothered in a wheat bin in W. H. Baker's warehouse at Berryville, Va., on August 13.

The Des Moines Elevator Co.'s elevator at Corley, Iowa, was destroyed by fire recently, supposed to have been caused by lightning.

Kirkpatrick, Lackland & Co.'s elevator at Chenoa, Ill., was damaged by fire on August 11. The loss is small and is fully covered by insurance.

Lightning struck the Andrews & Gage Elevator at Elora, N. D., during a severe electrical storm on August 26, considerably damaging that structure.

Twist Bros.' elevator at Rochester, Ill., was struck by lightning on August 17, and burned to the ground. The loss was \$6,500; insurance, \$4,500.

An explosion of a gasoline tank in the James Elevator at Missouri Valley, Iowa, on August 17, partly wrecked that structure. No one was injured.

Jameson & Hevener's elevator at St. Paul, Minn., was damaged by fire to the extent of about \$2,000 on August 11. The loss is fully covered by insurance.

The Atlas Elevator Co.'s elevator at McLean, Neb., was burned to the ground on the night of August 25. The loss amounted to several thousand dollars.

Dave Nickel, manager of the Farmers' Elevator at Butterfield, Minn., was painfully injured recently by the explosion of the gasoline engine at the elevator.

About one-third of the roof of the Churchill Elevator at South Bend, Ind., was blown off during a windstorm on August 13 and the smokestack leveled to the ground.

The elevator at Odell, Neb., owned by Samuel Q. Adams, was destroyed by fire at 6 o'clock p. m., August 23. The fire started in the engine room. The loss is estimated at \$4,000, with \$1,800 insurance.

During a conflagration at Kendrick, Idaho, on August 5, in which \$250,000 worth of property was destroyed, the Kittenbach Grain Co.'s warehouse was burned. The loss is \$8,000, with \$5,500 insurance.

Knittle & Co.'s elevator and flour mill at Boisvein, Manitoba, were destroyed by fire on September 1, together with 20,000 bushels of wheat and 700 sacks of flour. The loss is estimated at \$30,000, with \$13,000 insurance.

The Anchor Grain Co.'s elevator at Souris, N. D., was burned on August 19. The fire is supposed to have been caused by lightning. The loss is \$10,000, partly covered by insurance. The question of rebuilding has not been decided.

Peter Weimer's elevator at Rosewood, Ohio, collapsed on August 25, spilling the contents, consisting of 45,000 bushels of oats, out upon the ground. The greater part of the grain was saved. The elevator had been recently remodeled.

The grain elevator and flour mill at Mulberry, Ind., owned by the Jay Grain Co., were demolished by a cyclone which swept over that section the latter part of August. The elevator and mill were wrecked and the power plant completely ruined.

S. D. Kinsey's elevator at Croswell, Mich., on the Pere Marquette right-of-way, was completely destroyed by fire at an early hour on the morning of August 10. The burned structure was 40x220 feet in dimensions. The loss is \$17,000, with \$5,546 insurance.

During a severe electrical storm at Superior, Wis., on the evening of August 19, the cupola of Elevator R, in the Great Northern yards, was struck by lightning and caught fire. The fire department extinguished the flames before much damage was done.

There was \$38,000 insurance on Sheets Bros.' grain elevator at Cleveland, Ohio, which was gutted by fire on August 11. The loss is estimated at nearly half of this amount. The greater portion of the loss was caused by the damage to the grain by water. The elevator has a capacity of 75,000 bushels and it was about half full of grain. The

building is 150 feet long and 50 feet high, of frame construction.

One of S. M. Rose's elevators and his lumber yard at Cissna Park, Ill., were destroyed by fire on August 9. The fire is supposed to have been caused by sparks from a passing locomotive. The loss is estimated at between \$15,000 and \$20,000, with small insurance.

The loss on the contents and equipment of the Michigan Central Elevator at Toledo, Ohio, operated by the United Grain Co., which burned on August 1, was adjusted at \$97,747.45. The total loss on the contents and equipment was estimated at \$104,000. The salvage resulted better than was anticipated.

While loading grain at the Lake Shore Elevator in La Porte, Ind., on August 16, W. H. Bosserman met with serious and painful injuries. For the purpose of placing a grain spout in a car Mr. Bosserman walked out on a beam which projected from the elevator at a height of several feet from the ground. In some manner he lost his footing and fell, striking on his left side and sustaining a sprained ankle, a bruised back, a badly lacerated arm and other cuts and bruises about the body.

An incendiary attempt to burn Charles L. McMasters' elevator, on the C., H. & D. right-of-way at Tuscola, Ill., was made on the night of August 6. The fire was discovered and extinguished before much damage was done. Mr. McMasters is mayor of Tuscola and has incurred the enmity of the tough element of the town by his rigid enforcement of the ordinances. Some of these parties are believed to have started the fire out of revenge. An attempt to assassinate Mr. McMasters was made about a year ago.

Fire of unknown origin at Albion, Neb., on August 18, destroyed an elevator and warehouse owned by the Albion Milling Co. and badly damaged the flour mill. The fire occurred at 3:30 o'clock a. m., and originated in the elevator. The burned portion of the plant, as well as the remaining buildings, were all of frame construction, with the exception of the boiler and engine house, which is built of brick. The loss is reported at \$11,000. The loss on the burned structures was adjusted at \$2,852.75, and that on the stock at \$3,155.66.

A large part of the town of Bryant, S. D., was wrecked by a tornado which swept over that section of the state on August 20. One person was killed and a number badly injured. The property loss at Bryant is estimated at about \$40,000. All the elevators in the town were more or less damaged. The W. W. Cargill Co.'s elevator was struck by lightning in addition to being badly twisted by the wind. The Larkin Elevator was roughly used and the S. Y. Hyde Elevator Co.'s house was twisted out of shape and otherwise damaged. The Lake Preston Milling Co.'s elevator was only slightly damaged. Stoddard & Ketcham's elevator suffered very serious damage and the new elevator of Jones & Metcalf, which was not quite completed, was badly wrenched and twisted. At Willow Lake, S. D., the storm is said to have done even more damage than at Bryant. It is reported that the elevators at that place are all wrecked.

Frank M. Shaw, superintendent of the D. Rothschild Grain Co.'s elevator at Davenport, Iowa, was instantly killed on August 16, while at work in the elevator and while trying to protect others. He had ascended to one of the upper floors of the elevator about 8:30 a. m. to cover over the openings to a number of empty bins, and while thus engaged in some manner he fell into one and met instant death. The bins are 16 by 24 feet in dimensions and 44 feet deep. The unfortunate man, who weighed about 200 pounds, fell upon his head, which was terribly mangled when the body was recovered at the bottom of the bin. During the progress of the fall, Mr. Shaw struck one of the iron braces extending across the bin, which cut a deep gash through the skull and far into his head. The deceased was about 45 years of age. He is survived by his wife, four children, two brothers and a sister.

The Brackett-Wallace Mill and Grain Co.'s elevator and adjoining corn mill at Sherman, Texas, were destroyed by fire on August 11. A 50,000-bushel steel storage tank, also adjoining the elevator, became red hot on the side next to the fire, resulting in great damage to the wheat it contained. Two freight cars standing on the track between the buildings were also burned. The fire is supposed to have originated in the gasoline engine room, but the cause is unknown. The gasoline tank, which was located on the outside of the building, was found intact after the fire. The burned elevator was of frame construction and was built in 1900. The corn mill also was of wood, being erected last year. It had a daily capacity of about 400 barrels. The total loss occasioned by the fire, including the wheat stored in the steel tank, is about \$25,000. Insurance to the amount of

\$20,000 was carried on the property. Both the burned buildings are now being rebuilt.

A warehouse at Butte, Mont., owned by the Royal Milling Co. of Great Falls, Mont., was burned on August 8, causing a loss estimated at \$20,000, partially covered by insurance. The burned building contained a large quantity of wheat, flour and hay. The fire broke out at 1:30 o'clock p. m., and is supposed to have been set by tramps.

While playing in a wheat bin in the Sheffield-King Milling Co.'s elevator at Madison Lake, Minn., on August 31, James Anderson, a 16-year-old boy, was smothered to death. The lad had been playing around the elevator with the two sons of the manager and climbed into the bin. His presence in the bin was unknown to the employees when they opened it to load some cars, and the boy was suffocated before assistance could be given him.

SEEDS

King & Co.'s clover seed reports from Ohio are as a whole indicative of a short crop.

According to the recent Ohio state crop report clover seed is very poor and timothy seed fair to good.

W. W. Vansant has bought J. R. Stickler's warehouse at Farragut, Iowa, and will use it as a seed house after January 1.

Oscar H. Will & Co., seedsmen of Bismarck, N. D., are erecting a substantial seed warehouse and office building in that city.

Hamburg advises as to the European clover seed crop are generally that a poor crop will be bagged, only Chili showing an increase—2,000 to 2,500 tons against 1,500 to 2,000 tons a year ago.

Isaac Davis, dealer in grain, seeds and wool at Findlay, Ohio, recently made a sale of 1,500 sacks of alsike and clover seed to the Albert Dickinson Co. of Chicago.

The question of seed wheat for next year is causing a great deal of discussion in North Dakota, as very few fields are said to have been entirely free from the black rust blight.

The J. C. Robinson Seed Co. has filed articles of incorporation at Omaha, Neb., with a capital of \$10,000. James C. and Mary T. Robinson, William S. Mack and Louis S. Gould are the incorporators.

The J. A. Dieckman Jr. Seed Co. has been chartered at Cincinnati, Ohio. The capital stock is \$10,000 and the incorporators are: J. A. Dieckman Jr., Edward Huber, C. O. Schellenbach, J. W. Goettle and C. F. Dolle.

According to advices from Louisville, Ky., under date of September 1, twenty of the largest land owners in Clark County, Ind., have combined to secure a higher price for orchard grass seed. They have 2,000 sacks, each containing from 8 to 10 bushels, and are holding it for \$1.50 per bushel. The present market price is \$1.10.

The sale of the Harry N. Hammond Seed Co.'s business and property at Bay City, Mich., took place on September 6 in spite of the protest of Frank Bodi and J. S. Pond of Toledo, who stated that they preferred to have the business placed in the hands of a receiver and continued until a more advantageous time to dispose of it. The sale was opened, however, and A. E. Bousfield, the president, offered a bid of \$15,000. The board of directors held a meeting to consider the bid and Eugene Fifield, who holds \$17,000 in stock, opposed acceptance, arguing that the amount would only pay 50 cents on the dollar to creditors, saying nothing about the holders of stock. An adjournment was then taken.

Zahm & Co.'s circular of September 10 says: "Highland County, Ohio, dealer writes as follows: The market letters all talk 'short crop.' Our farmers also talk 'short crop'; at the same time we are daily receiving letters, telephone messages and samples by mail and person, which leads us to believe that our territory at least is favored with an average crop. We have already bought 535 bushels, while last year up to this time we had taken in but 28 bushels. Then the yield in some cases has been enormous. One man had 137 bushels from 32 acres, another 55 bushels from 9 acres (over 6 bushels per acre), both lots Mammoth. This afternoon a party came in with a sample of a 50-bushel lot of medium clover, the product of 10 acres. Another party, who had sold us his crop, took out bags to hold 50 bushels, brought us 67½, more than one-third more than he anticipated. Baltimore seed dealer writes as follows: We have to report the largest crop of red clover we have had for many years in this section and will have surplus quantities to ship to sections where seed crop is a failure this season."

OBITUARY

Isaac V. W. Dutcher, for many years a grain dealer in St. Louis, Mo., died recently at the age of 87 years.

Adolph C. Zinn, a member of the Milwaukee Chamber of Commerce and for many years a prominent maltster, died in Milwaukee, Wis., on September 1, after a brief illness. His death was caused by an attack of acute appendicitis.

Bernard Deary, head of the flour and grain firm of Deary & Son, Philadelphia, Pa., died at his home in that city on August 19, aged 70 years. The deceased was one of the old-time members of the Philadelphia Commercial Exchange.

Edward Wescott, of the firm of Wescott Bros., general merchandise and grain dealers at Van Lue, Ohio, died on August 17. His death was accidental, due to an overdose of morphine. The deceased was well known as a grain buyer in that section of the state.

Robert Atkinson, a member of the St. Louis Merchants' Exchange, died at his home in that city August 26, aged 59 years. He was head of the commission firm of Robert Atkinson & Co. until last December, when he retired from active business on account of declining health.

J. Hume Smith, a grain and flour dealer and exporter of Baltimore, Md., died in the Maryland University Hospital, that city, on September 5, of Bright's disease. He had been ill for several weeks. Mr. Smith was at one time president of the Baltimore Chamber of Commerce.

Henry Dusenbury of Jersey City, N. J., died suddenly at his summer home near Caldwell, N. J., on August 15, of apoplexy. The deceased was born near Newton, N. J., in 1828. In 1854 he removed to Jersey City and engaged in the hay and feed business in New York City. He retired several years ago. He was a member of the New Jersey Assembly in 1878-9, being elected on the Republican ticket. He leaves a widow.

Julius Alexander Kugelman died suddenly in Homburg, Germany, on September 3. The deceased was 53 years of age and until about eight years ago was a grain exporter in New York City and had a seat in the Produce Exchange. He then returned to his native city, Homburg, and engaged in business as a general importer. He had a branch office in Havana, Cuba, and was the general agent in Germany for the Atlantic Export Co.

John N. Reagan, superintendent of the Merritt Elevator at South Chicago, Ill., was found dead by employees of the elevator on September 3. His death was caused by a bullet wound in his head, but whether he committed suicide while temporarily insane or was killed by some unknown person is not definitely known. The verdict of the coroner's jury was that he committed suicide, but his relatives think he was murdered. The deceased was 32 years old and leaves a widow.

Charles S. Dole, formerly of Chicago, died at the home of his daughter in Kansas City, Mo., September 2. He was the first white child born in Oakland County, Mich., the date of his birth being November 2, 1819. His father was one of the founders of Syracuse, N. Y., and was the original owner of the town site. In 1848 he moved to Chicago and accepted a clerkship in the Chicago post-office under his uncle, George Dole, then postmaster. After a short time he resigned this position to engage in the live stock business. Later he entered the grain and elevator business. In 1852 he formed the firm of C. S. Dole & Co. He associated himself with George Armour and Wesley Munger, and under the firm name of Armour, Dole & Co. erected one of the first large elevators in Chicago. Mr. Dole retired from business in 1895 at the age of 77, making his home with his daughter, the only surviving member of his family.

James C. Kirkpatrick, a pioneer of Central Illinois, died at his home in Clarence, Ill., on August 30, aged 67 years. He had been in ill health for about three months preceding his death, which was caused by uræmic coma, the result of Bright's disease. The deceased was born in Adams County, Ohio, in 1837 and came to Illinois with his parents in 1851, settling in McLean County. His grandfather was one of the first settlers in Ohio and was a soldier in the war of 1812. Mr. Kirkpatrick when a young man engaged in farming, following this vocation for many years. In 1871 he moved to Ford County, this state, and bought a tract of land near the present town of Clarence. He engaged in the grain business at that place, which was then known as Kirks Station, in 1879. He later went into the general merchandise business, conducting that enterprise in connection with his grain business and farms. His wife, to whom he was married in 1857,

died about three years ago. He is survived by three sons, two of whom are in the grain trade at Penfield, Ill., and three daughters. He also leaves a sister and brother. The late Mr. Kirkpatrick was the owner of several hundred acres of land near Clarence, Ill.

Andrew J. Holden, vice-president of the Wheeler-Holden Company of Buffalo, N. Y., and formerly a well-known grain dealer of Livingston County, N. Y., died suddenly at his home in Buffalo on August 28, aged 71 years. He had been in poor health for about two years, his death being caused by heart trouble. Mr. Holden was born in Livonia, N. Y., and organized the Wheeler-Holden Company at that place in 1881. The business was moved to Buffalo in 1885. He leaves a widow.

FLAXSEED

The linseed oil mills at Winnipeg, Man., are closed down for the season and will not be reopened until fall.

During the month of July 46 bushels of flaxseed, valued at \$76, were exported, as compared with 223,550 bushels, valued at \$239,555, for the preceding July. For the seven months ending with July 25,650 bushels of flaxseed, valued at \$26,496, were exported, as compared with 648,728 bushels, valued at \$764,146, for the corresponding seven months ending with the preceding July.

A dispatch from Duluth, Minn., dated September 5, says: "The steamer Sahara cleared yesterday for Buffalo with a cargo of 330,000 bushels of flax. This is the largest cargo of any kind of grain ever carried on the Great Lakes as far as weight is concerned. The ship was loaded at the Peavey elevators in six hours, or at the rate of 55,000 bushels an hour. The Sahara did not load to her capacity, for she cannot do so and get about Buffalo harbor. The record of loading 330,000 bushels of flax into the Sahara in six hours has called special attention to the great dispatch that is possible for boats to load at the head of the lakes."

Concerning the North Dakota flaxseed crop a prominent business man of Kenmare, that state, is quoted as follows in a recent interview by a St. Paul paper: "While Ward County is in the heart of the North Dakota flax belt, the farmers are abandoning its culture to quite an extent. They are in better shape now than in the years of the early development of the country to raise wheat, and flax is being driven out because it is such a robber of the soil. Only about 30 per cent of the cultivated acreage is this year planted to flax, and while the flax acreage is larger than in previous years, it is because the total area under cultivation has been increased to quite an extent. The flax crop this year will be one of the best our farmers have ever raised."

The large flaxseed bins and elevator of the Minnesota Linseed Oil Co., which are being built in Minneapolis, Minn., by the Barnett & Record Co., are rapidly nearing completion and will be ready for use by the first of the new year. The elevator and bins are something unique in the way of construction in that part of the country. Both the elevator, a structure 36x24 feet at the base and 110 feet in height, and the three bins, which are circular and 36 feet in diameter, with a height of 80 feet, are built of selected Princeton white brick. The walls of the elevator at the base are 30 inches in thickness and at the top are 13 inches in thickness. It is roofed with steel, as are the bins and steel hoppers. The machinery will be operated by electricity and will hoist the flaxseed from a hopper under the first floor of the elevator, where it will be unloaded from the cars and distributed in the different bins. The bins are entirely separate from each other, but a common hopper running under all of them will draw the seed from them when needed in the plant. It will be transported from the elevator to the plant by means of an overhead chute. The capacity of the bins is 60,000 bushels each, or 180,000 bushels for the three combined. No wood enters into the construction of the bins or elevator and they will be practically fireproof. It is claimed that brick is superior to tile for the reason that it prevents the seed from "sweating" and keeps it at an even, cool temperature all of the time. The elevator will be ready for the installation of the machinery the latter part of this month.

The Bryan, one of the Wallace grain barges, loaded with grain from the Bruce Elevator at Marseilles, Ill., sunk near the intersection of the Illinois and Michigan Canal and the drainage canal on September 5. The boat will be a total loss, together with its contents, about 6,000 bushels of grain.

HAY AND STRAW

Allen & Garrison succeed A. N. Johnson in the hay and fuel business at Mt. Vernon, Ill.

About forty kinds of native grasses were on exhibition at the recent Minnesota State Fair at Minneapolis.

A new hay market has been opened at Davenport, Iowa. There are now two hay markets in that city.

The Wisconsin hay crop this year was unusually good, the yield being above the average in quality and quantity.

J. L. Ellsworth has sold his interest in the Wyalusing Hay Co. at Wyalusing, Pa., to his brother, William Ellsworth.

The total receipts of baled hay at Baltimore, Md., for the month of August were 2,919 tons. The receipts for the same period last year were 2,687 tons.

Advices from Beatrice, Neb., dated September 6, state that haying in that section is about finished and that the best crop in years has been harvested.

The official grading of new hay on the Baltimore market began on September 1. The rules of the National Hay Association are followed strictly as to both inspection and grading.

Clarence A. Euler & Co. is the style of a new firm of hay and grain receivers which has commenced business at Baltimore. The head of the firm is an experienced hay man.

The first carload of new Michigan hay on the Baltimore market arrived in that city the latter part of the week ending August 20. It was No. 1 timothy and brought \$15 per ton.

At a meeting of the Chicago Hay Receivers' Association, held on September 1, it was decided that quotations from the Chicago hay market will not be furnished to farmers at stations where there are regular shippers.

A recent report from Chehalis, Wash., says that very little grain will be thrashed in that section of the state this year. Hay is so high and scarce and grain so poor that most of the oats and wheat have been cut for hay.

The Baltimore & Ohio Railroad Company has let the contract for the erection of a large hay shed at Baltimore, Md. The structure will be two stories high, 80x337 feet, of steel construction, with corrugated iron sides and stone foundation. It will cost about \$40,000.

Warehouse No. 2 of the Lathrop Hay Company at Hollister, Cal., was destroyed by fire recently, causing a total loss of \$50,000. The net loss above insurance is \$21,200, of which \$10,000 falls on the hay company; the balance of \$11,200 is a loss to the farmers who had hay in storage.

At a gathering of a number of Indiana and Western Ohio hay dealers at Ft. Wayne, Ind., recently, it was stated that Indiana has almost a full crop of hay and that the quality is much better than the Eastern product. Some of the dealers claim that there is discrimination in freight rates East in favor of Illinois shippers.

According to the recent report of W. R. Holloway, United States consul-general at Halifax, Nova Scotia, the extreme drought has proven disastrous to the hay crop of that province. He states that the hay crop is much less than half an average, and in some places is less than a third. In some places the crop is so light that it seems hardly worth the labor of cutting it. The drought is the most disastrous in the memory of the oldest inhabitant, so the report states.

The August crop bulletin issued by the Ontario Department of Agriculture has the following concerning the hay crop of that province: "Taking the province as a whole this crop may be briefly described as a fairly large one, and it has been well saved in most cases. Some of the early hay was caught by rain, but the bulk of the crop was housed in excellent condition. The poorest average yields were reported from Lake Erie counties, where much damage had been done by winter killing."

A press report from Ellensburg, Wash., dated August 21, says: "The hay harvest in Kittitas Valley is practically over and the balers are at work in all directions. Delivery is just beginning and prices are better than counted on this early in the season. The first sales were made at about \$10 for the new crop, but a number of sales were made last week at \$12.50, with the tendency still upward. There is a strong tendency to sell early this season, and none are so eager as those who last year sold for \$20, refusing \$18.50 and \$19 a ton, and who sold this spring for as low as \$10. The crop in Kittitas Valley this year is believed to be,

on the whole, lighter than last year, especially the timothy, but the quality was never better, as the season has been ideal, only one rain having fallen since cutting began. The quantity for export will be very large. A compressor has just been put in here, the first one in Central Washington.

Advices from Churchville, N. Y., concerning the hay crop of that section say: "The hay harvest is now over and the farmers have their barns well filled with a fine quality of hay. Some hay was slightly damaged by the wet weather at the beginning of the season, but those that held off secured their hay without its getting wet."

According to the Burlington (Vt.) Free Press the hay crop of the Chittenden County section of the Champlain Valley is hardly up to the average yield. Newly seeded meadows made a good showing, but the yield of old meadows was remarkably light. In Northeastern Vermont and in some parts of Lamoille County there was a big hay crop, and from other parts of the country come reports of a bountiful grass crop. In spite of the semi-hay famine cry in some parts of the state there is little prospect that the shortage will make its influence widely felt.

An alfalfa mill is being built at Wichita, Kan., by Otto Weiss, a local flour dealer. The plant will cost about \$10,000 and is to be ready for operation by October 1. It will have a grinding capacity of 20 tons of alfalfa a day and will be operated by a 30-horsepower electric motor. The alfalfa is cut while green and then baled. After reaching the mill it is first converted into chop and then ground, being mixed with grain of various kinds according to the class of feed desired. For horse feed the alfalfa meal will be mixed with bran, corn chop, shorts, oat chop and linseed meal. Feed for various kinds of live stock and poultry will be manufactured at the new mill, different ingredients entering into the different kinds of feed, but the basis of each being alfalfa meal. There are said to be only three other alfalfa mills west of the Mississippi River in addition to the one at Wichita. One of these is at Omaha, one at Kansas City and the other at St. Louis.

In a recent issue the Orange Judd Farmer sums up the new hay crop as follows: "The returns this month from Orange Judd Farmer's county correspondents confirm what has been previously stated in these columns regarding the good promise for hay. Aside from portions of the Missouri Valley, where cutting was interfered with by too much rain, the Western crop has been secured in fairly good condition. It now appears that the average rate of yield is very little below the excellent crop of last year in the West, and somewhat above the outturn of last year in the East, suggesting a total crop substantially as large as was secured in 1903. When it is considered that the grass crop this year started under conditions that seemed somewhat unfavorable, the final outturn in yield per acre is striking evidence of the satisfactory weather conditions which existed during May and June. The preliminary estimate of rate of yield per acre shows an average for the whole country of 1.43 tons per acre. Through the Ohio Valley the comparison is variable, some states showing a little more than last year; others, like Michigan, Indiana and Illinois, a little less. On the other hand, in the Northwest, where there has been ample rainfall throughout the season, a yield even heavier than that of last year has been secured. In Ohio, Missouri and Kansas the rate of yield is slightly less than in 1903, but is fairly up to the average."

REVIEW OF THE CHICAGO HAY MARKET.

The prices ruling for hay in the Chicago market during the past four weeks, according to the Daily Trade Bulletin, were as follows:

During the week ending August 20 quotations at the close ranged as follows: Choice Timothy, \$14.00@15.00; No. 1 Timothy, \$12.50@13.50; No. 2 Timothy, \$11.00@12.00; No. 3 Timothy, \$8.00@10.00. Choice Prairie, 9.50@10.00; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$8.00@8.50; No. 3 Prairie, \$7.00@7.50; No. 4 Prairie, \$5.00@5.50. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$9.00@15.00 for fair to fancy Timothy, \$5.00@7.50 for State, \$8.00@11.00 for Kansas, Nebraska and Iowa Prairie Hay. Rye Straw sold at \$7.00@7.50, Wheat Straw at \$5.75@6.00, Oat Straw at \$5.50@6.00, and Barley Straw at \$6.25. The receipts for the week were 4,248 tons, against 3,644 tons for the previous week. Shipments for the week were 183 tons, against 185 tons for the previous week.

During the week ending August 27 quotations at the close ranged as follows: Choice Timothy, \$13.00@13.50; No. 1 Timothy, \$11.50@12.50; No. 2 Timothy, \$10.00@11.00; No. 3 Timothy, \$8.00@9.00. Choice Prairie, \$9.50@10.00; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$8.00@8.50; No. 3 Prairie, \$7.00@7.50; No. 4 Prairie, \$5.00@5.50. Inside prices on Prairie Hay for State and outside for Kansas,

Nebraska and Iowa Hay. Sales ranged at \$8.00@14.50 for poor to fancy Timothy, \$8.50 for Thrashed Timothy, \$6.25@7.00 for State, \$7.50@10.50 for Kansas, Nebraska and Iowa Prairie Hay. Rye Straw sold at \$6.75@7.75, Wheat Straw at \$6.00, and Oat Straw at \$5.50@6.00. The receipts for the week were 5,375 tons, against 4,248 tons for the previous week. Shipments for the week were 253 tons, against 183 tons for the previous week. Choice grades of Timothy and Prairie Hay were only in fair supply and the demand was moderate during the week. The arrivals of low grades were large and the demand was light.

During the week ending September 3 quotations at the close ranged as follows: Choice Timothy, \$12.50@13.00; No. 1 Timothy, \$11.50@12.00; No. 2 Timothy, \$10.00@11.00; No. 3 Timothy, \$8.00@9.00. Choice Prairie, \$9.50@10.00; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$8.00@8.50; No. 3 Prairie, \$7.00@7.50; No. 4 Prairie, \$5.00@5.50. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$7.00@13.25 for poor to choice Timothy, \$6.25@7.00 for State, and \$8.00@10.00 for Nebraska and Kansas Prairie Hay. Rye Straw sold at \$7.00@7.50. The receipts for the week were 6,116 tons, against 5,375 tons for the previous week. Shipments for the week were 264 tons, against 253 tons for the previous week. The market ruled dull during the week, especially for the low and medium grades.

During the week ending September 10 quotations at the close ranged as follows: Choice Timothy, \$12.00@12.50; No. 1 Timothy, \$11.00@11.50; No. 2 Timothy, \$9.50@10.00; No. 3 Timothy, \$8.00@9.00. Choice Prairie, \$9.50@10.00; No. 1 Prairie, \$9.00@9.50; No. 2 Prairie, \$8.00@8.50; No. 3 Prairie, \$7.00@7.50; No. 4 Prairie, \$5.00@6.00. Inside prices on Prairie Hay for State and outside for Kansas, Nebraska and Iowa Hay. Sales ranged at \$8.00@13.00 for fair to choice Timothy, \$6.00@7.50 for State, and \$7.50@10.00 for Nebraska and Kansas Prairie Hay. Rye Straw sold at \$7.50, and Oat Straw at \$5.50. The receipts for the week were 4,201 tons, against 6,116 tons for the previous week. Shipments for the week were 249 tons, against 264 tons for the previous week. The market for both Timothy and Prairie Hay ruled dull during the week. The arrivals were smaller than for the previous week, but the demand was also restricted. An easier feeling prevailed with prices 50 cents lower for the poorer grades, while the choice grades were about steady.

IN THE COURTS

D. L. McLaughlin of Kewanee, Ill., sues the Neola Elevator Co. for landlord's lien on grain of a tenant who did not pay his rent but sold the grain. The claim is \$300.

George G. Stratton, grain dealer, New Orleans, filed a petition in bankruptcy on September 1. His liabilities are \$38,000, while he does not record any assets. Steinhart & Co., the cotton brokers, are heavy creditors.

The Circuit Court at Kansas City has rendered a judgment in favor of the Union Pacific Railway Company in an action brought by the Moffat Commission Company to recover \$800, claimed to be the value of a certain lot of grain lost by reason of the high water. The Grain Company will appeal the case.

The Minnesota Grain Company has filed an appeal to the Supreme Court of Minnesota for a new trial of the case in which I. L. Corse & Co. were awarded damages. The suit is over securities in the form of elevator properties given on notes by the Minnesota Grain Company which the plaintiff alleges were found to be worthless.

The Northern Elevator Co. has appealed from an order of non-suit at Buffalo. The papers in the case show that a cargo of grain was shipped to the elevator company at Buffalo, the Lehigh Valley Railroad Company being the carrier. Through a mistake the grain was sent to the elevator of a different company. This elevator soon after was burned and the grain destroyed.

On August 12 the Hoyt Grain Co., Minneapolis, began an action against the Kemper Grain Co., Kansas City, claiming \$24,833. The Hoyt Company claims that it purchased of the defendant at different times during July grain amounting to 50,000 bushels under contract at 93c; that because of representations that various cars had been shipped as contracted for, drafts were honored to the amount of \$18,032, and it is now claimed that as no part of the grain was ever delivered this money should all be paid back, together with \$6,800 as damages because of lost profits. The Minneapolis & St. Louis Railway Company has been garnished in the suit.

BARLEY AND MALT

Philip Herget will rebuild his malt house at Pekin, Ill., which burned on July 16. A grain dump has already been built.

The recently appointed barley committee of the Baltimore Chamber of Commerce are: Oliver F. Lantz, G. F. Gibney and John H. Biemiller.

Colfax, Wash., advices state that a farmer near Almonta recently thrashed 500 acres of barley, which yielded an average of 50 bushels per acre.

There are said to be prospects of a good European demand for American malting barley as the Russian barley crop this year is poor and the grain is badly stained.

The Dakota barley, a hard, flinty grain that does not malt as well as other grades of barley, will not be given a separate grade on the Milwaukee Chamber of Commerce, despite the recent sentiment of the traders to that effect. When the amendment to establish the grade was presented for a vote, it was rejected 90 to 20, the traders having changed their opinion when it became noised about that giving the barley a separate grade would drive down the price and keep it out of the Milwaukee market. The general opinion was that the adoption of the amendment would have cast a stigma on Dakota barley, thus reducing its price and preventing shipment to the Milwaukee market. This would have defeated the purpose of the local grain traders, who desire to have as much barley shipped there as possible. The original purpose of the amendment was to prevent the mixing of Minnesota and Dakota barley, which is said to produce a grain that does not give the best malting results. Most of the barley shipped to the Milwaukee market is used for malting. The proposed amendment was as follows: "There shall be a grade of barley to be known as Dakota No. 2 barley, having the appearance and characteristics of Dakota barley and in other respects the requirements of No. 2 barley. There shall be a grade to be known as standard Dakota barley, having the appearance and characteristics of Dakota barley, and in other respects the requirements of standard barley. The above grades shall be deliverable on contracts, unless otherwise specified, as provided in Section 7 of Rule XI."

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.			
Imports—	Bushels.	Value.	
July, 1903	135	\$	93
July, 1904	226		135
Seven mo. end. July, 1903.....	7,659		3,936
Seven mo. end. July, 1904.....	25,477		12,816
Exports—			
July, 1903	114,976		65,024
July, 1904	98,618		55,400
Seven mo. end. July, 1903.....	1,595,546		922,051
Seven mo. end. July, 1904.....	2,661,251		1,527,196
BARLEY MALT.			
Exports—			
July, 1903	50,333		39,011
July, 1904	47,976		34,692
Seven mo. end. July, 1903.....	224,914		165,878
Seven mo. end. July, 1904.....	295,134		210,453

BARLEY CROP OF 1904.

The Western Brewer's annual report on the barley crop covers Iowa, Minnesota, Wisconsin, the Dakotas, the barley production of which states influence and govern the markets of the whole country both as to barley as well as to malt. California, notwithstanding its being the largest barley-producing state of the Union, exerts but little influence on our markets, because the largest part of its crop being exported to foreign countries and but a very small part of it finding its way to the East for local consumption. The yields are estimated, on the basis of direct reports, as follows: Iowa, 78 points, reporting from 50 counties, 15,405,600 bushels, color mixed, quality better than last year; Minnesota, 62 points, in 31 counties, 31,668,000 bushels, color bright, quality good; Wisconsin, 35 points, in 22 counties, 14,000,000 bushels, bright color, quality first class; South Dakota, 44 points, in 24 counties, 11,932,800 bushels, color disappointing, quality generally good; North Dakota, not harvested at date of the inquiry; Nebraska, which has passed out of the list of barley producers, 1,863,000 bushels; Kansas, 4,650,000 bushels; Michigan, 600,000 bushels; California, 29,688,000 bushels, color fairly bright, weight very light; Montana, 500,000 bushels, and Oregon, only a light crop.

The general conclusions to be drawn from the inquiry are as follows:

"The last government report estimated this year's total acreage in barley in the United States

at 5,144,200 acres, or about 144,200 acres more than last year's total acreage, showing an increase of a trifle over 3 per cent in acreage. The average per cent increase in acreage, as shown in the five principal barley states, is considerably reduced by the showing made in other parts of the Union, and especially on the Pacific Coast. Taking the figures as given by the last government report as our basis, and multiplying the same by the average yield of 28 bushels per acre (last year's average yield was 26.4 bushels per acre), we shall have a total yield of a little over 144,000,000 bushels of barley in the United States, or about 13,000,000 bushels in excess of last year's crop, which would be but 1.6 bushels more per acre over last year's average yield. Most of the increase in acreage and yield, however, has been in the principal barley-producing states, save California. The probable yield in the states of Iowa, Minnesota, Wisconsin, South Dakota and North Dakota will be about 87,000,000 bushels; California, with its estimated yield of 29,000,000 bushels, will, with the other barley-growing states of the country, swell the total as above stated.

"Both in color and quality the crop is superior to the 1903 crop. The proportion of bright barley is much larger. There is enough stained barley in some of the states so as to designate the crop as diversified. As to the quality of the new crop, it may be called an exceptionally good one. There is apparently less barley this year of the kind that was known as feed during the past season. Present indications, as shown by samples from the different barley states, are that this year's barley, as to its germinating properties, will be more satisfactory.

"As to values, we would not venture to prophesy. Nowadays there are too many outside influences that affect the prices of barley, aside from the usual effect of the relative conditions of supply and demand. A good deal, however, hinges on the values of corn and oats, and should these grains sell during the coming year at high figures, farmers will naturally expect equally as good prices for their barley. In this connection it should be remembered that during the last few years the feeding of barley to stock has become almost as general in the Eastern and Western states as it is either on the Pacific Coast or in European countries, and therefore it is not, as in bygone days, dependent for its value solely on the demand for malting purposes. We therefore cannot look forward to very low prices."

BARLEY AS REPORTED BY BACON & CO., MILWAUKEE.

A circular letter containing the new barley crop estimates for five of the principal barley-growing states has been sent out to the trade by E. P. Bacon & Co. of Milwaukee, Wis. The letter is a summary made up from 380 replies received by them from the barley-producing sections of the states named, in answer to inquiries sent out recently. According to this circular, the situation is about as follows:—Wisconsin: About same production as last year and less than two years ago; quality averages good, a large percentage of the reports being to the effect that it is choice and the berry medium to plump. A few advise that the berry is light weight. Color uneven, depending on harvest conditions. Yield per acre from 18 to 50 bushels; average about 32 bushels, or same as last crop, and five bushels per acre less than crop of 1902.—Minnesota: More even crop and an increased production compared with last year. Quality averages better than last crop; ranges from low malting to choice, but larger proportion may be classed under latter head. About two-thirds advise the berry plump and one-third medium weight. No reports of damage by unfavorable weather sufficient to cause material unsoundness. Color variable; some advise no discoloration, but larger percentage report damage in this respect. Recent unfavorable harvest weather makes it probable that greater portion will be more or less discolored. Acreage as compared with last year 33 1-3 per cent increase to 33 1-3 per cent decrease, but an equal number advise same as last year; on the whole, no change of importance. Yield per acre estimates 20 to 40 bushels; average about 32 bushels, or 5 bushels per acre more than last crop and the same as 1902.—Iowa: Reports from this state show a marked improvement over last year. Larger production due to large yield per acre and better quality. Quality ranges from "feed barley" to choice malting, but apparently larger percentage of the latter kind and a fair proportion of medium malting quality. Larger percentage of reports advise the berry plump and only a few mention that it is light weight. No reports of damage sufficient to cause material unsoundness. Color uneven. Many localities report no discoloration, while the larger percentage advise to the contrary. Some state that it is badly discolored and a few that it is bleached. Acreage estimates as compared with last year vary materially and range from 200 per cent increase to 50 per cent decrease. About one-third report no change. On the whole, there is ap-

parently a small increase. Yield per acre ranges from 20 to 50 bushels and averages about 36 bushels, or 8 bushels more than last crop and 4 bushels more than 1902.—South Dakota: Smaller production than last crop, due to reduced yield per acre. Quality not as good as last crop, being larger percentage that is medium and light weight. About one-half reports advise berry as being plump. Some reports of damage by hail and rust, but on whole no reports of serious damage by unfavorable weather. Color uneven; more discoloration than last crop. Acreage estimates as compared with last crop vary somewhat and range from 20 per cent decrease to 50 per cent increase. Average is about 5 per cent gain. Yield per acre ranges from 20 to 50 bushels and average about 30 bushels, or 3 bushels less than last crop and 2 bushels less than crop of 1902.—Nebraska: Advices from localities where barley is raised indicate considerable increase in production as compared with previous crops, due to increased acreage and larger yield. Quality ranges from feed to fair malting. Small percentage of reports state berry is of light weight, but larger number advise that it is plump. Color is generally dark; most reports say that it is discolored and some say badly, also bleached. Acreage compared with last year ranges from 50 per cent decrease to 200 per cent increase, and the average shows a gain of about 25 per cent. Yield per acre from 18 to 45 bushels and average about 32 bushels.

FOREIGN NEWS

The rice crop of Japan this year is one of the largest on record.

The Roumanian government has prohibited the exportation of all fodder crops.

Japan's barley crop is estimated at about 96,600,000 bushels, or 40 per cent greater than last year.

The wheat crop of Great Britain is this year very irregular, with yield about two bushels below the average. The imports needed are estimated at about 66,000,000 cwt.

The London correspondent of the Country Gentleman says: "There will be no second hay or clover harvest throughout central and northern Germany worth speaking of."

Richard Marshall of Adelaide, well known in South Australia as a breeder of wheats, has produced several strains of rustproof wheat that seem also to be good yielders of flour, although as to this few exhaustive tests have been made.

The recent publication of the agricultural returns for Great Britain and Ireland shows the area under wheat this season to be the lowest on record, viz., 1,406,512 acres, the previous lowest being 1,454,015 in 1895, when the price of wheat was so disastrously low as to render the premier cereal hardly worth growing, the value in the autumn of 1894 falling as low as 52½¢ per bushel. This past season the smallness of the area is mainly due to the very unfavorable sowing period. Only six years ago, viz., in 1898, when prices were high, the area reached 2,155,000 acres; but it is necessary to go back to 1887 to find the area above 3,000,000 acres, while to find 4,000,000 acres one must travel back to the '50's.

U. S. Minister Jackson at Sinaia, Roumania, reports: "It is at present anticipated that the crops in Roumania and Hungary will be poor, and that the maize crop in particular will be almost a total failure. In consequence the price of maize has gone up, and it was feared that this increase might be followed by the sale of the whole crop, as well as all that remains from last year, and that much suffering among the peasants would result. This led to the prohibition of the exportation of maize. In commercial circles, however, considerable opposition to this prohibition has already been shown, and as the opponents of the government have given evidence of an intention to make the question one of politics, it is impossible to foretell the duration of the prohibition. In any event, it is probable that a market for maize will be opened in northern Italy. Large quantities of that grain are shipped from Kustendji and the Danubian ports to Trieste and Venice every year, and the Italian minister here has already notified his government that this year the usual supply must be obtained from other sources."

A car inspector was captured in the L. E. & W. yards at Indianapolis on September 3 in the act of stealing wheat from a car. He was sitting under a car catching the wheat as it came out of an auger hole he had made in the car floor. He had stacked up eight sacks preparatory to carting it away.

PERSONAL

Fred Bock is grain buyer in the new elevator at Loomis, S. D.

W. J. Schuller has charge of the Hyde Elevator at Pipestone, Minn.

Randall Curry is in charge of the Northwestern Elevator at Hope, N. D.

George Innes is now manager of the Soo Elevator at Rushmore, Minn.

G. D. Cheatham is now in charge of the Western Elevator at Aurora, S. D.

E. M. Hanson is now in charge of the Empire Elevator at Stewart, Minn.

William Thomas of Marion, Minn., will manage an elevator at Utica, Minn.

John McBrady now has charge of the Cargill Elevator at Graceville, Minn.

Luther Evans is in charge of the Anchor Grain Co.'s elevator at Carroll, Neb.

A. E. Severance is now agent for the Peavey Elevator Co. at Nacora, Minn.

Percy Dunn is now in charge of the Myrtle Grain Co.'s elevator at London, Minn.

Frank Muncey is grain buyer at Waltham, Minn., this season for W. F. Markham.

George Milnes is agent for the Western Elevator Co. at Groton, S. D., this season.

John Snyder has charge of the Eagle Roller Mill Co.'s elevator at Estelline, S. D.

J. H. Fitzgerald has charge of the Andrews & Gage Elevator at Oriska, N. D.

Olin Hart has taken the position of grain buyer with Alder & Hart at Volin, S. D.

Wesley Craggs has taken charge of McFadden & Co.'s grain business at Kilbourne, Ill.

Henry Anderson will buy grain for the Sioux Elevator Co. at Valley Springs, S. D.

E. G. Hinds is in charge of the Robinson Elevator Co.'s new house at Flaxton, N. D.

A. H. Foote is now local manager for the Benson Grain Co. at Worthington, Minn.

Andrew Arneson is now grain buyer at Ward, S. D., for the Davenport Elevator Co.

Frank Saum is the new grain buyer at the Jensen Elevator, Walnut Grove, Minn.

Thomas Offerdahl has resigned as buyer for the Eagle Roller Mill Co. at Echols, Minn.

P. H. Miller is now in charge of the Crown Elevator Co.'s house at White Rock, S. D.

Martin Parsons has taken a position with the Cargill Elevator Co. at Ronneby, Minn.

Dan O'Shea has taken charge of the Inter-State Elevator Co.'s house at Triumph, Minn.

W. A. Smith has been engaged to buy grain at Elmore, Minn., for the Benson Grain Co.

Paul Ziegler, late of Alice, N. D., has taken charge of an elevator at Sanborn, N. D.

R. W. Freeman is now manager of the Doffing Elevator Co.'s house at Hastings, Minn.

E. M. Ostrander is now agent for the Atlantic Elevator Co. at New Paynesville, Minn.

D. C. Donovan is the new agent for the Northwestern Elevator Co. at Osnabrock, N. D.

William Gamble has taken a position in O'Neil, Kaufman & Pettit's elevator at Kiowa, Kan.

Martin Drake is the new agent at the Sleepy Eye Milling Co.'s elevator in Ivanhoe, Minn.

Ray Murrell will buy grain for the S. Y. Hyde Elevator Co. at Fountain, Minn., this season.

Aston Temanson will buy grain for the Thorpe Elevator Co. at Leeston, Minn., this season.

Paul Maier has taken the position of buyer for the American Hominy Co. at Mt. Vernon, Ind.

Thomas Ford succeeds Frank Hillyer as buyer for G. W. Van Dusen & Co. at Estelline, S. D.

Gus Plumerson of Luverne, Minn., has taken charge of the Atlas Elevator at Le Mars, Iowa.

Olof Sathre, late of Detroit, has taken charge of Andrews & Gage's elevator at Verndale, Minn.

Levi Bechtel has opened the Imperial Elevator at Cavalier, N. D., and has charge as manager.

G. A. Koenig has taken the position of buyer for the Western Elevator Co. at Lamberton, Minn.

Acton Cross of McHenry, N. D., is now in charge of the Great Western Elevator at Binford, N. D.

Henry Kraus now has charge of the Hubbard & Palmer Co.'s elevator at Vernon Center, Minn.

George C. Stokes, formerly at Fairfield, Iowa, is now at Rochelle, Ill., with the Neola Elevator Co.

Knud Odden has resigned as buyer for the Northwestern Elevator Co. at Benson, Minn., after six-

teen years' service, and taken charge of the Hennepin Elevator Co.'s new house at Benson.

J. W. Beach of Litchfield, Minn., will buy grain at Sherman, S. D., for the Farmers' Elevator Co.

Charles Podratz has taken his old position with the Pacific Elevator Co. at Hanley Falls, Minn.

George Cayott has taken charge of the Osborne-McMillan Elevator Co.'s house at Stewart, Minn.

Sever Gullickson will buy grain for the Northwestern Elevator Co. at Ihlen, Minn., this season.

E. R. Phipps has been appointed agent for the Woodworth Elevator Co. at New Paynesville, Minn.

Albert Johnson of Englevalle, N. D., will have charge of an elevator at Elliott, N. D., this season.

Otto Zimmer of Lonsdale, Minn., has taken charge of the Prairie Elevator at Richville, Minn.

Albert Russell of Bloomfield, Neb., is now grain buyer at Carroll, Neb., for the Peavey Elevator Co.

P. C. Allen has been chosen manager of the Barker Elevator Co.'s elevator at Green Valley, Ill.

W. L. Johnson of Lake Mills, Iowa, will buy grain at Norman, Iowa, for the Iowa-Minnesota Cereal Co.

G. Gilbertson of Canby, Minn., is manager of the Marshall (Minn.) Milling Co.'s elevator at Gary, S. D.

A. Doxie has removed from Lanark, Ill., to Reinbeck, Iowa, where he has taken charge of an elevator.

Peter Leirness of Ada, Minn., is now agent for the St. Anthony & Dakota Elevator Co. at Borup, Minn.

S. L. Chapin has been retained at manager of the Hubbard & Palmer Co.'s elevator at Luverne, Minn.

Hans Lee has been given the position of agent for the Osborne-McMillan Elevator Co. at Brooten, Minn.

C. E. Taylor has taken the management of the Eagle Roller Mill Co.'s new elevator at Madison, Minn.

George F. Restorff is again buyer for the Minneapolis & Northern Elevator Co. at Eagle Bend, Minn.

A. C. Stolte has opened the Hubbard & Palmer Co.'s elevator at Blue Earth, Minn., and will have charge.

W. P. O'Loughlin of Maple Lake, Minn., has been stationed at Fullerton, N. D., for the Atlantic Elevator Co.

Charles Welter, with the Sleepy Eye Milling Co., has taken charge of that company's elevator at Lucan, Minn.

John Karr, until recently at Hamilton, N. D., is now in charge of McCabe Bros.' elevator at Bottineau, N. D.

F. L. Holm has taken charge of an elevator at Kempton, N. D., for the St. Anthony & Dakota Elevator Co.

H. S. Thompson is now in charge of the Monarch Elevator at Oberon, N. D. He was formerly at Oriska, N. D.

C. A. Newman is now manager of the Minneapolis & Northern Elevator Co.'s house at Pelican Rapids, Minn.

George Boe of Cooperstown, N. D., has been engaged as buyer for the Farmers' Elevator Co. at Binford, N. D.

John Larson has succeeded H. L. Tosch as manager of the Eagle Roller Mill Co.'s elevator at Cobden, Minn.

E. L. Martin of Northville, S. D., has been appointed buyer for the Western Elevator Co. at Iroquois, S. D.

T. J. Tradewell has removed from Wabasso, Minn., to Winthrop, that state, and taken charge of an elevator.

H. A. Yatter of St. Paul, Minn., is the new agent for the St. Anthony & Dakota Elevator Co. at Edinburg, N. D.

Otto O. Sletten has accepted the position of agent for the Osborne-McMillan Elevator Co. at Manfred, N. D.

Frank Taylor, late of Corning, Iowa, is now manager of the Nebraska-Iowa Grain Co.'s elevator at Farragut, Iowa.

R. E. Heinemann, late of Appleton, Minn., is now in charge of the Northwestern Elevator at Holloway, Minn.

Peter Brick succeeds M. J. Roelike as manager of the Osborne-McMillan Elevator Co.'s elevator at Lintonville, Iowa.

A. Erickson, late of Willow Lake, S. D., will have charge of the Northwestern Elevator at Benson, Minn., this season.

Eli H. Porter, a well-known grain dealer of Wilmington, Vt., was the Democratic nominee for governor of that state at the recent election. He has

been engaged in the grain trade at Wilmington since 1888.

John Bixby has been appointed manager of the Garden City Elevator at Garden City, Minn., to succeed Mr. Stolte.

Charles Knutson of Audubon, Minn., is in charge of the Andrews & Gage Elevator at Lake Park, Minn., this season.

Orin A. Thompson has removed from Fairmont, Minn., to Listmore, Minn., and taken charge of the Wohleter Elevator.

C. W. Oxley, grain buyer for the W. W. Cargill Co., has been transferred from Lanesboro to Minnesota Lake, Minn.

F. C. Reynolds is now manager of the elevator and feed mill at Kasota, Minn., owned by the Hubbard & Palmer Co.

C. M. Johnson has been employed by the Hennepin Elevator Co. to take charge of its elevator at Charlesville, Minn.

Alvin Rustad has resigned as manager of the Farmers' Elevator at Dalton, Minn., and is succeeded by J. Stortroen.

H. J. O'Connell of Plainview, Minn., is now manager of the Thompson Elevator at Hastings, Minn., for R. E. Jones, lessee.

Charles Fansett of Bathgate, N. D., has taken charge of an elevator at West Hope, N. D., and will move to that place.

Charles D. Odekirk has been made agent at Bingham Bros.' elevator in Redwood Falls, Minn., succeeding A. P. Goudy.

C. W. Nelson has removed from Paynesville, Minn., to Alexandria, and taken charge of the Osborne-McMillan Elevator.

C. R. Sather has resigned his position with the Duluth Elevator Co. at Donnelly, Minn., to take charge of a lumber yard.

Jesse Kilpatrick is in charge of the Harrington Elevator at Pipestone, Minn., leased by Howard & Bemis of Edgerton, Minn.

Thomas Downey of Bellingham, Minn., has accepted the position of buyer for the Hunting Elevator Co. at Taopi, Minn.

A. H. Balfour has succeeded Peter Stuhr as wheat buyer for the Minneapolis & Northern Elevator Co. at Euclid, Minn.

Guy Willis of Winnipeg Junction, Minn., has taken charge of the Dakota Elevator Co.'s house at Portland Junction, N. D.

T. M. Burns, who has had charge of the Victoria Elevator Co.'s elevator at Drayton, N. D., has been transferred to Mauby, S. D.

T. T. Bakke of Twin Valley, Minn., has removed to Drayton, N. D., and taken charge of the Monarch Elevator Co.'s elevator.

J. J. McIntyre has given up his position as manager of the Imperial Elevator at Argyle, Minn. His successor is A. Hendrick.

Hollis Morgan of Hartford, S. D., has removed to Ash Creek, Minn., and taken charge of the Hubbard & Palmer Co.'s elevator.

Mason Smith is buyer at Alpena, S. D., for Truax & Betts, being in charge of what was formerly the Loomis Elevator.

A. D. Kellogg has been appointed agent for the Robinson Elevator Co. at Harvey, N. D. Stanley Ferguson will be his assistant.

William Felker has resigned as manager of W. J. Urice & Son's elevator at Garrison, Iowa, and taken a position at Marengo, Iowa.

Mr. Turner, formerly buyer for the Magnolia Mercantile Co., has taken the management of the Farmers' Elevator at Luverne, Minn.

Richard Johnson of Lake Elizabeth, Minn., has taken the management of the Northwestern Elevator Co.'s house at De Graff, Minn.

H. J. Waddell has been transferred as buyer for the W. W. Cargill Co. from Iona, Minn., to Jackson. His successor is Daniel Haffey.

C. B. Martin has succeeded T. C. Thompson as manager of the Davenport Elevator at Larchwood, Iowa. Mr. Thompson will move to Oregon.

Walter Chase of New Prague, Minn., has taken charge of the Eagle Roller Mill Co.'s elevator at New Ulm, Minn., succeeding Elias Kellerman.

Dave Wolf, formerly buyer for the Northwestern Elevator Co. at Louisburg, Minn., has taken charge of the McCaull-Webster Elevator Co.'s house.

Jacob Knudson has removed from Hatton, N. D., to Northwood, that state, and taken charge of Winter & Ames' elevator, succeeding Thomas N. Wold.

August Edenberg has taken charge of an elevator at New Prague, Minn., owned by a milling company. He was until recently at Carver, Minn.

Christian Kratz has resigned as manager of the Funsinn Grain and Elevator Co.'s elevator at Dimick, Ill., and is succeeded by Joe Klebel. Mr. Kratz was one of the winners in the drawing at the opening of the Rosebud reservation, and has

gone to South Dakota. He will have charge of an elevator there for a Minneapolis milling company.

J. Dietz of Armstrong, Iowa, has taken charge of the W. W. Cargill Co.'s elevator at Chandler, Minn., which had been closed for several months.

F. E. Stiles has moved from West Brooklyn, Ill., to Savanna, Ill., where he will act as manager of the elevator recently purchased by the Atlas Grain Co.

H. A. Gregg, who was formerly grain buyer at Eckert & Williams' elevator in Lake Mills, Iowa, is now buyer at the Northwestern Elevator in that town.

T. H. Rude has severed his connection with the local milling company at Sacred Heart, Minn., and will buy grain for the Victoria Elevator Co. at that place.

J. J. Buchanan, who has been agent for the Monarch Elevator Co. at Motley, Minn., for the past three years, has been transferred to Sauk Center, Minn.

S. MacMurray has resigned as local manager for the Omaha Elevator Co. at Wood River, Neb., to take a similar position with the A. B. Jaquith Grain Co.

James Montgomery has been engaged by the Great Western Elevator Co. to take charge of the elevator at Sleepy Eye, Minn., formerly owned by T. J. Murfin.

J. E. Dayton of Gaylord, Minn., who recently took charge of the Great Western Elevator Co.'s house at Gibbon, Minn., has resigned and is succeeded by W. F. Lammers.

Robert J. Hunter, who was formerly at Norwich, N. D., has taken charge of the Stewart Elevator at Granville, N. D., recently purchased by the Acme Grain Co.

Thomas Homme, until recently with the Farmers' Elevator Co. at Kenyon, Minn., has taken charge of the elevator at that place owned by the E. A. Brown Grain Co.

James Haskins has been appointed agent at Tekoa, Wash., for the Pacific Coast Elevator Co., succeeding R. W. Armstrong, who resigned to enter a medical college.

J. E. Blair, for the past two seasons in charge of the Cargill Elevator at Hankinson, N. D., has been transferred to Hancock, Minn., the house at Hankinson being closed.

E. A. Dalen, who has brought wheat in Farwell, Minn., for the Osborne-McMillan Elevator Co. the past four years, has taken charge of that company's elevator at Glenwood, Minn.

Amos Curtis of Lockhart, Minn., has been appointed agent for the St. Anthony & Dakota Elevator Co. at Ada, Minn., succeeding Mr. Rowe, who resigned on account of ill health.

Arthur Shumway has severed his connection with the Powers Elevator Co. at Josephine, N. D., and removed to Devils Lake, N. D. E. E. Manning is his successor at Josephine.

Emil Nygren, for the past eleven years manager of the Atlas Elevator Co.'s elevator at Canby, Minn., has resigned and taken a position in M. A. Mortenson & Co.'s elevator at that place.

S. T. Mead is now manager of the Loomis Elevator at Bombay, Minn. C. L. Johns, the former manager, has removed to Worthington, Minn., and taken charge of the Truax & Betts Elevator.

E. J. Matteson writes that he has taken the management of the Walter-Bowman Elevator Co.'s elevator at Adrian, Minn., taking charge September 1. Mr. Matteson was until recently at Athol, S. D.

Harry Budd is now agent for the Imperial Elevator Co. at Beltrami, Minn., having resigned his position in the local bank to take the place. His father is agent for the St. Anthony & Dakota Elevator Co. at Beltrami.

G. A. Swan has disposed of his interest in the business of Fremire & Swan, commission merchants at Minneapolis, and will devote his entire attention to his line of elevators, one of which is located at Albert Lea, Minn.

S. Steenson, formerly manager of the Cornwall Elevator at Finley, N. D., succeeds Lewis Samuelson as agent for the St. Anthony & Dakota Elevator Co. at that place. Mr. Samuelson has removed to West Hope, N. D.

William Christianson has resigned as buyer for the Empire Elevator Co. at Montevideo, Minn., after fifteen years' service, and removed to Lake View Park, Minn. T. H. Beckum of Bryant, S. D., succeeds him at Montevideo.

August Lundquist, for the past two years in charge of the Peavey Elevator at Atwater, Minn., has taken charge of the house at Willmar, Minn., owned by the same company. A Mr. Johnson of Pennoch, Minn., succeeds him at Atwater.

Philadelphia is rejoicing over the revival of the grain trade, which in August last was double that of the same month of 1903.

NEW ELEVATOR INSURANCE SCHEDULE.

The new standard grain elevator insurance schedule adopted in 1901 has been revised, as shown below, and surveys are now being distributed to the Illinois field men with the request that they furnish the information desired promptly, so that the raters of the State Board can extend the information on the new schedule. As soon as this is done an elevator rate book will be issued to the companies, giving specific rates on every grain elevator in this state. The standard schedule is applicable to the West, Minnesota and the Dakotas excepted. As revised the schedule is as follows:

Elevator Building. To be brick, stone or frame covered with tile, metal or slate, (except driveways.)

Roof. Roof to be metal, slate or composition.

Foundation. To have substantial stone foundation supporting elevator building.

Belt, Drive and Stairs. To be in tower outside with two hatches, one at top and one at bottom.

Fire Protection. To be protected by city water hydrants within 300 feet, or to have fire pump supplying hydrant and 100 feet of $1\frac{1}{2}$ or 2 inch hose sufficient to reach all parts of grade floor.

STEAM POWER.

Boilers and Boiler Stack. Boilers to be in brick boiler house 25 feet distant or in frame boiler house 40 feet distant. Boiler stack to be brick.

A Basis rates\$1.50

DEFICIENCY CHARGES—(Cumulative).

(To be applied to elevator building, boiler and (or) power room within 25 feet (if both deficient make but one charge), which are to be classed as one risk and take the same rate.)

Building and (or) Cupola. If not as per standard, add 10.

Roof. If shingle or board, add 15.

Foundation. If without stone foundation, add 10.

Belt Drive. (a) If inside open drive to top of house, add 15; (b) If inside, cut off by at least two hatches between bottom of shaft and cupola floor, add 05.

Cleaning and Clipping Machines. If inside, or in addition not cut off by brick wall and fire door, add 15.

Corn Sheller and (or) Feed Grinding Machinery. If inside, or in addition not cut off by brick wall and fire door, add 25.

Note—No charge for flax reels or hand-power machinery.

Dust or Cob Room. (a) If inside elevator building or attached thereto, or in adjoining boiler house not cut off by brick wall and fire door and patent dust collectors not used, add 15; (b) If outside and detached, within 25 feet, in frame room, add 10.

Condition. Dirty, lack of care, accumulation of cobs, chaff or dust inside or exposing building, add 10 to 50.

Fire Protection. (a) If city water hydrants not within 300 feet, or without fire pump, add 15; (b) If without approved hydrant and hose equipment on grade floor, add 10.

Boilers. (a) If boilers in main building not cut off, add \$1.50; (b) If boilers in frame addition without brick wall and fire door cut-off, add \$1.00; (c) If boilers in frame addition with brick wall and fire cut-off, add 30; (d) If boilers in frame boiler house detached and within 20 feet of elevator building, add 75; (e) If boilers in frame boiler house detached over 20 and under 40 feet from elevator building, add 30.

Note—Brick veneered, brick lined or ironclad, deduct 10 cents from items B to E, and if with approved fire shutters, deduct 5 cents additional from same items.

(f) Boilers in brick addition without fire door cut-off, add 70; (g) Boilers in brick room detached and within 5 feet of elevator building, without fire door or shutter cut-off, add 50; (h) Boilers in brick addition (or within 5 feet) with fire door or shutter cut-off, add 15; (i) Boilers in brick room detached over 5 and under 10 feet from elevator building without fire door or shutter on side exposing elevator, add 25; (j) Boilers in brick room detached over 10 and under 25 feet from elevator building without fire door or shutter on side exposing elevator, add 15.

Note—Where adjoining brick boiler house has frame wall between it and the elevator building, add 10 cents to items F and G.

Fuel. If shavings, corn husks or chaff used for fuel in room, not fireproof, or without automatic dust feed (no charge for brick boiler house over 10 feet distant or frame boiler house over 25 feet distant), add 10.

Boiler Stack (iron). (a) For iron stack inside elevator building, add 50; (b) For iron stack through roof of adjoining brick or frame boiler room not approved; or breeching from boilers not safely arranged, and without brick wall and fire door cut-off, add 35; (c) For iron stack through

roof of adjoining brick or frame boiler room with brick wall and fire door cut-off, or safely arranged, or through roof of detached boiler house, add 10; (d) For iron stack on brick base less than 1 foot above roof of boiler house without brick wall and fire door cut-off, add 10.

Exposure. For exposures add as per Mercantile tariff of exposure charges. No exposure charge should be made to elevator from corn cribs, dust rooms, open sheds, boiler or power rooms or small outbuildings not considered an exposure which should, when within 25 feet, take the elevator rate.

Objectionable Features. (General arrangement not desirable, old style, not built for the economical handling and transfer of grain; steam pipe grain dryer occupancy; corn sheller inaccessible; other occupants; cob burner exposure; submit.) Add

GASOLINE POWER—Pump feed engine to be in brick room adjoining and communicating by fire door; or in frame ironclad or brick-veneered room, 10 feet or more distant—the supply tank to be underground, 5 feet or more distant; or above ground, 20 feet or more distant from elevator building, addition or driveways.

GAS POWER.—Engine to be in brick room adjoining and communicating by fire door; or in frame ironclad or brick-veneered room, 10 feet or more distant from elevator building, addition or driveway.

HORSE POWER.—No horses to be stabled or fed inside elevator building, additions or driveway or within 20 feet thereof.

ELECTRIC POWER.—Electric motors to be in brick room, outside; or if in frame room to have brick wall and fire door cut-off to elevator building, addition or driveway.

BASIS RATES.

B Gasoline or Gas Power\$1.25

C Cable or Shaft Power..... 1.25

D Horse Power 1.25

E Electric Power 1.25

DEFICIENCY CHARGES—(Cumulative).

(To be applied to elevator building and power room within 25 feet (if both deficient make but one charge), which are to be classed as one risk and take the same rate.)

Building. If not metal or slate clad (except driveways), add 10.

Roof. If shingle or board, add 10.

Foundation. If without stone foundation, add 10.

Belt Drive. (a) If inside open drive to top of house, add 10; (b) If inside, cut off by at least two hatches between bottom of shaft and cupola floor, add 5.

Cleaning and Clipping Machines. If inside or in addition not cut off by brick wall and fire door, add 15.

Corn Sheller and (or) Feed Grinding Machinery. If inside or in addition not cut off by brick wall and fire door, add 25.

Note—No charge for flax reels or hand-power machinery.

Fire Protection. If city water hydrants not within 300 feet, add 10.

Gasoline or Gas Power. (a) If engine inside elevator building, pump feed, add 50; (b) if engine has gravity feed, add 75; (c) if engine house is frame, adjoining or within 10 feet of elevator building, and pump feed, add 30; (d) if engine has gravity feed, add 50; (e) if engine house is brick lined, or iron clad or iron lined, adjoining or within 10 feet of elevator building and pump feed, add 25; (f) if engine has gravity feed, 40; (g) if engine house is brick and communicating with elevator building, without fire door and pump feed, add 15; (h) if engine has gravity feed, add 30; (i) if gasoline supply tank is inside elevator building, add 50; (j) if gasoline supply tank is within 10 feet of elevator building and above ground, add 25; (k) if gasoline supply tank is over 10 and under 20 feet from elevator building, and above ground, add 15; (l) if gasoline supply tank is within 5 feet of elevator building and under ground, add 10.

Note.—Items j, k and l are extra charges for location of gasoline supply tank and apply to the storage of gasoline as well as tank supplying engine.

Horsepower. If horses are stabled or fed in elevator building or within 20 feet thereof, add 50.

Note.—The above charge is to be made in all cases except where the following indorsement is attached to and made a part of policy form:

"It is hereby mutually understood and agreed between the assured and this company that in consideration of the reduced rate at which this insurance is written, that the insured warrants and agrees that during the term of this policy and of certificates issued hereunder, no horse or horses shall be stabled or fed in any elevator building or additions described in schedule attached hereto, except buildings at

and it is mutually agreed by and between the assured and this company that any violation of this agreed warranty shall void this policy and cause

a forfeiture of all assured's claims for loss at any location where such breach of warranty occurs."

Electric Power. (a) For electric motors inside elevator building or in frame addition without brick wall and fire door cut off, add 10; (b) if power obtained from railway trolley, add as per rules.

Exposure. For exposures add as per mercantile tariff of exposure charges. No exposure charge should be made to elevator from corn cribs, dust rooms, open sheds or power rooms or small outbuildings not considered an exposure, which should, when within 25 feet, take the elevator rate.

Objectionable Features, add

FRAME WAREHOUSE—(Without Power).

F Basis Rate, \$1.25.

DEFICIENCY CHARGES—(Cumulative).

Building. If not metal clad, add 5.

Roof. If shingle or board, add 5.

Exposure. For exposures add as per mercantile tariff of exposure charges.

Objectionable Features, add

Grain Rate. Annual grain or schedule or floating grain, 25 cents less than building rate.

Corn Cribs. Annual rate, 40 cents, add for exposures. No general grain schedule should include corn cribs unless the same is written at warehouse rates.

The term "Elevator Building" is intended to include and apply to all additions and driveways.

Note 1. Elevators or warehouses having a capacity in excess of 75,000 bushels shall not be included in floating grain schedule or insured under floating grain form.

Note 2. In adjusting the rate on floating or general policies the total capacity of all the elevators or warehouses in any given schedule, whether used or not, must be charged for according to the foregoing tariff.

Note 3. All cancellations of insurance on grain elevators or warehouses and contents shall be at short rate of full schedule rate.

Boiler and Power Rooms. Brick, detached over 25 feet, and frame, detached over 30 feet, can be rated on a basis of \$1 for brick and \$1.50 for frame, with additions for deficiencies as per schedule, omitting charges under item No. 10.

Specific Insurance. Separate items should cover boilers and engines and all electric apparatus.

Application of Schedule. This schedule not to be applied to "Terminal" or other elevators rated under specific schedules. Cable Power Basis should only be applied when boiler or power rooms are located beyond maximum distance described in the standard for each class of power.

CORN IN NEW ENGLAND.

Eastern farmers have become so accustomed to seeing their local markets supplied chiefly by grain from the Mississippi Valley, and Eastern dealers have been forced for so many years to look to the West for the greater part of their supply that both classes are disposed to regard the grain farming of the Atlantic Coast states as in a state of decadence when compared with conditions of, say, fifty years ago. This idea has been very much exaggerated, the fact being that in a general way this section is producing about as much grain as ever, and in certain localities, and even in whole states, very much more of certain staple grain and food crops than when the first comprehensive agricultural census was taken in 1850, the difference being that the grain produced is more largely consumed on the farms, while other products are depended upon for cash sales.

It is an exceedingly creditable showing for the Eastern farmer that he has been able to produce the immense amounts of perishable foods required by an unprecedented growth of urban population, and continue at the same time to raise as much grain as in the days when it was a main source of revenue.

Take for example the production of corn in the state of Connecticut, which was 399.4 bushels per square mile in 1850, and 398.7 bushels per square mile in 1900, a difference of less than one bushel per square mile after fifty years, or far less than the usual variation between the crops of two successive years. In Pennsylvania the corn product per square mile actually rose from 440.9 bushels in 1850 to 1,153 bushels in 1900, an increase almost as great as has been her wonderful growth in population, the corn crop of the state averaging 8.56 bushels per capita of her population in 1850 and 8.23 bushels per capita in 1900, and this on a basis of shelled grain, ignoring all the corn now raised for soiling and for ensilage. Meantime, Georgia, a cotton, fruit and trucking state, has increased her square mile corn product from 510 to 577 bushels in the same period.

The real meaning of these figures is best understood if we stop to think of the difference between the yield per acre and yield per square mile as recorded in official statistics, the rate of yield per acre being based on the number of acres actually devoted to a certain crop, while yield of pro-

duction per square mile is based upon the total crop of the state and its total area, regardless of the proportion of land actually occupied by the crop. Thus a desert state like Nevada may show a high rate of yield per acre for all crops grown, but an insignificant production per square mile.—W. A. Sherman in Country Gentleman.

CONCENTRATION OF THE OAT CROP.

The course of oat production along the Atlantic Coast illustrates as forcibly as does that of any one grain the real influence of improved transportation facilities and consequent western competition in feeding crops. The effect has not been radically to decrease the total eastern product, but rather to concentrate it within more clearly defined boundaries, either in localities especially favorable for the production of large crops, or in districts not so readily supplied from outside.

A glance at the railway map of New England shows that Maine, New Hampshire and Vermont are not so easily supplied with grains from the West as are Massachusetts, Rhode Island and Connecticut; and the census figures from 1850 to 1900 show that the oat yield in the former group has been well maintained throughout the fifty years, the total for 1900 being 7,038,685 bushels, against 5,462,152 at the first agricultural census in 1850. Most of the increase has been in Maine, where the production has risen from 72.96 bushels per square mile in 1850 to 127.09 bushels in 1900. On the other hand, the southern New England states have shown a steadily and rapidly decreasing total of oats since 1860, their crop as reported in 1900 being 604,490 bushels, against 2,946,746 bushels forty years before.

Passing for the moment New York and Pennsylvania, the reports of the six census years show no regular increase in the oat crop of any of the states further south. In South Carolina and Florida, the crop of 1900 was larger than that of 1850, but much smaller than in several intervening census years, and shows no definite tendency to increase in the more recent census periods. The gross crop south of Mason and Dixon's line and east of the mountains is by the last census only about two-thirds as large as in 1850. In other words, oats cannot be raised profitably in this section for sale or home consumption in competition with the western prices of the past thirty years, especially on any land which can be made to produce even fairly good corn or wheat. As exceptions to this, I might name certain localities where winter oats are a safe crop, yielding on an average in these states in favorable seasons perhaps twice as many pounds per acre as the spring-sown varieties. In this connection we must remember that none of these states are even now carrying as much live stock as before the civil war.

In the oat crop of New York and Pennsylvania we have another illustration of the ability of the older states to maintain their grain production, notwithstanding western competition and the immense increase of home population, with the consequent withdrawal of farm lands for gardening, fruit growing, residence and ornamental uses. At only one census has the combined crop of these two states failed to show an increase over that at the preceding census, namely in 1880, as compared with 1870, and the census of 1880 has been subjected to perhaps as much criticism as any other. In spite of this slight temporary decrease, the oat figures from these two states show such a stability and gradual increase that, if taken by themselves, no one would suspect that outside production had influenced them. Their combined production for six census years in round numbers is as follows: In 1850, 48.1 million bushels; 1860, 62.6; 1870, 71.7; 1880, 71.4; 1890, 75.1; and in 1900, 78.0 million bushels.

In 1850 the oat crop of New York and Pennsylvania was reported as more than that of any other four states combined; in 1900 their combined crop was less than one-half as great as that of either Illinois or Iowa; was six million bushels less than that of Wisconsin, but five million greater than that of Michigan. In 1850 New York and Pennsylvania are credited with nearly one-third of the national total; in 1900 less than 8½ per cent.

It is not probable that we have anywhere nearly reached the limit of western surplus production, but we have probably passed the stage of most oppressively low western prices. The condition of the American meat market precludes the idea that we shall see a permanent material cheapening of a staple feeding grain in the Atlantic Coast markets, except in sympathy with a general decline in prices. It seems fair to assume, therefore, that while the eastern barley crop has finally broken down under pressure from the West, and while in buckwheat eastern supremacy is more pronounced than ever before, the oat crop continues comparatively stable,

and farmers are gradually growing larger crops, with a reasonable prospect of continuing to do so.

The following showing of the rate of production of oats per square mile, as reported in 1900 through a series of contiguous states from New York westward to the Missouri River, is interesting as showing the actual density of production in states having widely different aggregate crops: New York, 856 bushels per square mile; Pennsylvania, 828 bushels; Ohio, 1,032; Indiana, 963; Illinois, 3,220; Iowa, 3,035 bushels. Nebraska, extending from the Missouri westward far into the arid regions or "bad lands," does not afford a fair basis for square-mile comparison, although the concentration in the eastern third of the state is not strikingly lower than in Iowa. Considering the large portions of New York and Pennsylvania covered with forests, or too mountainous for cultivation, the production of oats in proportion to total cleared land is probably greater than in Ohio or Indiana.

This increasing production and concentration in eastern states is the more remarkable in the light of the rise of the national yield per capita. Fifty years ago the country had 6.32 bushels, and in 1900, 12.40 bushels per capita. Since the distribution of population and oats is entirely different, it results in showing 75.44 bushels per capita in Iowa, 69.33 in North Dakota, 48.34 in South Dakota, 54.40 in Nebraska, 42.28 in Minnesota, and 40.62 in Wisconsin. While local consumption of oats is regulated more by the number of farm animals than by population, still cities are great oat-consuming centers, and the above per capita showings indicate an enormous quantity of oats necessarily sold for use beyond state lines.

The per capita increase of oats is practically the same as that of wheat, and far larger than that of corn, which is further proof of the heavy proportion which must have been put on the market, and in the light of these facts it would seem that no eastern man who has found it to his advantage to raise oats up to the present need have any fear as to the future of this particular part of his farming, for this surplus from the newer states will not now increase faster than the growth of the cities will absorb it. As pointed out in the beginning, it has already operated to eliminate the commercial eastern crop in the purchasing regions with best facilities for distribution, and the growth of demand along these transportation lines will probably take all the increase which will come over them, leaving the eastern farmer to hold the market he now has, and to supply its increasing consumption if he can.—W. A. Sherman in Country Gentleman.

STORAGE ELEVATORS FOR MALT.

In order to overcome the objection urged against the steel tank as a storage receptacle for barley and malt (that barley and malt both contain a certain amount of moisture which would condense on the inside of the walls of the tank when the temperature outside was below that within) the tile tank has been suggested, and "many of these elevators have been built in different parts of the country," says Wm. H. Prinz in the American Brewers' Review. "The first were of the flat-bottom type, but later they were made hopped. The bins made of tile are circular in form and consist of an inner wall which has iron bands cemented into the tile at intervals to withstand the pressure of the grain and an outer wall of tile forming the insulation. This style of elevator was thought ideal; but it was soon found it was very easy to destroy the outside insulation, so that it was on the same basis as a steel tank elevator.

"The proper way to build barley and malt elevators, and the one which will come into use all over the world, is to construct them of brick with a large air space and the ventilating openings between the bin proper and the outer wall. In this construction the bins can be made square, with no loss of space and therefore no intermediate bins. The air space should be made large enough so that a man can enter it and tar the surface towards the storage part. If suitable precautions are taken in building such an elevator, it will be perfect in every respect for the storage of barley and malt.

"An elevator for the storage of barley and malt should be built with bins in proportion to the size of the malting capacity of the malt house. For instance, for a malt house of a capacity of one thousand bushels daily the bins should hold not more than five thousand bushels each; for a house of two thousand bushels' capacity daily the bins should be double the size (or ten thousand bushels); and a malt house of three thousand bushels' capacity, three times the size, etc. There is much loss in the storage of barley as well as of malt if bins are larger than this proportion.

"Another most essential feature in the barley and malt elevator is the cleaning house. The cleaning machinery should have a hopper above and a hopper below, each of the capacity of a carload of grain. This will insure a steady flow of grain to and from the machines. High drops

of grain should be avoided, as it injures the barley and hulls the malt; and as the hulls are a very necessary filtering material, they should be preserved.

"For shipping malt a sacking floor should be provided with a chute connecting the sacking floor with the car at a height to deliver the sacks on the shoulders of the men loading the car. This makes all lifting of the sacks unnecessary. There should also be provided in the chute a counter to count the sacks and avoid mistakes. The best cleaning machinery is very necessary, also a dust-collecting system which collects the dust in the elevator and conveys it over to the boilers to be burnt. Correct scales are also very necessary. The receiving scale should be a track scale; the shipping scale, if malt is shipped in bulk, should be a hopper scale, but if it is shipped in sacks a track scale is preferable.

"To summarize the main points in a barley and malt elevator: It should be absolutely fireproof and well insulated; have sample-track facilities; a good and well-arranged cleaning house; good cleaning machinery, correct scales, small bins and a good power plant."

JULY GRAIN MOVEMENT.

The returns of internal commerce issued by the Bureau of Statistics show at twelve primary grain markets 30,844,305 bushels of grain reported as arriving in July, against 42,655,464 bushels in July, 1903, being a decrease of 27.7 per cent. For seven months the difference was proportionately much less, the higher prices of the closing months of the crop year having helped more nearly to balance the receipts of this year with those of 1903. To July 31, 1904, receipts of grain aggregated 299,308,086 bushels, and 326,001,825 bushels in 1903, or a decrease of 8.2 per cent.

The handling of the grain was done mainly by the railroads; for while lake tonnage of all kinds in July (8,507,192 tons) was the largest on record, it was chiefly composed of ore and coal, and trunk line movements of flour, grain and provisions for thirty weeks ending with July 30 were all larger in volume than the corresponding movements in 1902 and 1903. Shipments of flour from Chicago and Chicago points amounted to 4,621,986 barrels this year, compared with 2,663,908 barrels last year and 3,063,423 barrels in the preceding year. Grain shipments increased to 58,273,000 bushels, in contrast with 53,630,000 bushels in 1903 and 41,664,000 bushels in 1902.

Grain receipts at the Atlantic seaboard during July were larger than those of either May or June, amounting to 12,813,733 bushels. In July, 1903, the corresponding total was 18,492,370 bushels. Among these five ports of Portland, Boston, New York, Philadelphia and Baltimore, Boston alone shows an increase in receipts for July this year over those of July, 1903. For seven months, however, none of the ports show a record for this year equal to that of the preceding year, the totals being 94,082,609 bushels to July 31, 1904, and 151,513,374 bushels in 1903.

In southern territory receipts of grain at Louisville for seven months were 14,336,915 bushels, compared with 13,046,047 bushels in 1903. Shipments of grain for seven months at Galveston were 5,354,943 bushels, in contrast with 10,490,702 bushels in 1903. The corresponding figures at New Orleans were 19,445,079 bushels to July 31, 1903, and 5,748,817 bushels in 1904.

Philadelphia's first car of new crop oats arrived on August 10, consigned to E. L. Rogers & Co. It came from Ohio, graded No. 2 white natural, and sold for 41½c.

Tacoma's first wheat shipment of the current crop was loaded on August 19. It consisted of 1,500 tons blue stem, club and red f. a. q. The grain goes to San Francisco.

The Department of Agriculture has hit upon a new idea for the distribution of free congressional seeds. From this time on it will supply flower seeds, instead of vegetable seeds, to congressmen who represent urban constituencies. The seeds are intended for planting in pots and window boxes, and each consignment of them sent out will be accompanied by a little pamphlet of instructions, telling people how to cultivate window gardens and potted plants. Many congressmen are understood to think highly of this scheme. Hitherto it has been customary to supply members from the cities, who had no agricultural constituents, with turnip, radish and beet seed, for which they had no possible use. It was an absurdity, and so it came about that, quite commonly, the urban congressman would exchange his seeds with a rural congressman in bulk, receiving in return public documents or some other equivalent. Now that flower seeds are to be given away, the distribution may be of some real benefit, making many a city window beautiful with blossoming plants at the expense of a paternal government.

TRANSPORTATION

The steamer John Crerar of Chicago took out the first grain cargo to be unloaded at the new steel elevator in Montreal.

According to advices from Minneapolis, the new cut rate tariff on rye and barley, made by the Wisconsin Central, will stand.

The improvement in marine business during the latter part of August caused the Canadian fleets to resume operations. Many of the vessels have secured grain cargoes.

Western roads practically have decided to cease absorbing the switching charges on grain delivered at Missouri River points for points farther east. This, it is said, will have the effect of increasing the rate from \$3 to \$5 per car.

The abrogation of the Kansas City Board of Trade rule requiring local weights is said to have had the effect of relieving what threatened to be a congestion of grain cars at that point. The rule was suspended for 30 days and as a result grain cars are moving freely through the Kansas City gateway.

Heretofore lake grain insurance has expired on December 1, while vessel insurance did not expire until December 5. The underwriters have now changed this so that grain insurance will extend to December 5, expiring at the same hour with vessel insurance. Rates have, however, been advanced to 45 cents per hundred.

Lake grain traffic has shown some improvement of late, but the season has not been generally satisfactory to vessel men. There is no lack of vessel room at Chicago and as a consequence rates are low. There has been some figuring on late cargoes and one agent states that he has received bids for boats to load corn or wheat late in November at 2½ cents.

The Santa Fe has made changes in grain and grain products rates over its own line from Fort Worth, Texas. The new schedule applies to points on its own line beyond the group differentials, higher than the flat rates previously applying to Fort Worth from Indian Territory and Oklahoma points in determining through rates on grain and grain products.

The Union Pacific has made an important change in grain terminal charges between Omaha and Council Bluffs. Grain destined for Chicago and other eastern points will in future pay a rate of 20 cents a ton, and be delivered to connecting roads at Council Bluffs. Formerly a switching charge of \$3 a car was made and the cars delivered at Omaha. This change will have the effect of increasing the rate on grain from \$3 to \$5 a car. Connecting lines thus far have absorbed the extra charge.

It is stated that the Canadian government intends to put ice breakers at work to break up the heavy ice which forms in the St. Lawrence just above Quebec. In this way it is believed navigation can be kept open four weeks later in the autumn and two weeks earlier in the spring. If this can be accomplished the importance of Montreal as a grain port will be greatly augmented. In 1903 this port stood third in the list of grain ports and it is expected that extending the season for a month at the time grain is moving freely will cause the port to forge to the front as a grain shipper.

At a joint meeting of Eastern and Western traffic men on August 16, the transportation committee of the Chicago Board of Trade protested against the alleged inequality of grain rates from the West through St. Louis, as compared with the rates from the same points through Chicago. It was contended that the railroads discriminate against the Chicago market, inasmuch as the rate from Kansas City through St. Louis by way of Toledo to the seaboard is 28½ cents, as against 29½ cents by way of Chicago. The railroad men insisted that the differential did not amount to anything, as practically no grain moved over the route in question.

At a special meeting of representatives of Eastern lines, held in Chicago on August 31, it was agreed to discontinue the through rate of 20½ cents on coarse grains from the Twin Cities to the seaboard. The ruling went into effect September 11. The rate on coarse grains from Chicago to New York is now 17½ cents. The elimination of the low through rate on coarse grains is due to the transportation committee of the Chicago Board of Trade. It insisted that, to avert discrimination against Chicago, the privilege of milling in transit here should be allowed on grain shipped on the 20½-cent through rate from Minneapolis to New York. The Eastern lines decided to cancel the 20½-cent through rate from Minneapolis to New

York rather than continue it and grant the milling-in-transit privilege here.

Every effort is being made to improve the new Omaha line of the Chicago Great Western. The company's terminals at Omaha are nearing completion and when done will enable the Great Western to compete successfully with the old lines between Chicago and Omaha and the Twin Cities and Omaha.

LARGER SLEEPING CAR BERTHS.

One of the few railroad companies that owns and operates the sleeping cars in service on its lines is the Chicago, Milwaukee & St. Paul.

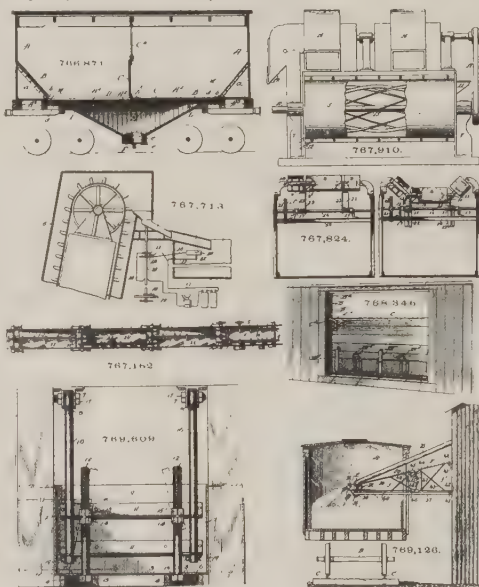
The sleeping cars on this line were formerly Pullman cars, operated by the Pullman Company, but for a dozen years past the railway company has owned and operated the sleeping car equipment. In building its sleeping cars, a departure from the old standard pattern of cars has been made to the extent of adding about six inches to the width and height of the sleepers. This permits of wider and higher berths. Length has also been added to berths, so that comfort is found in them which is lacking in ordinary sleeping cars.

These large cars are in service on practically all of the lines of the St. Paul road, and are very popular with the traveling public.

LATE PATENTS

Issued on August 9, 1904.

Grain Car.—Michael Brosman, Chicago, Ill., assignor of one-half to Leon Garrow, Chicago. Filed July 27, 1903. No. 766,871. See cut.



Drier.—Amand Leyer, Philadelphia, Pa. Filed Feb. 1, 1904. No. 767,158.

Transporting Apparatus for Grain.—George W. McNear Jr., Oakland, Cal. Filed June 29, 1903. No. 767,162. See cut.

Issued on August 16, 1904.

Signal for Grain Bins.—John G. Raygor and Clifford Slife, Dedham, Iowa. Filed Sept. 17, 1903. No. 767,713. See cut.

Portable Conveyor.—William L. McCabe, Seattle, Wash. Filed Oct. 9, 1902. No. 767,824. See cut.

Grain Scourer.—John E. Mitchell, St. Louis, Mo. Filed April 23, 1904. No. 767,910. See cut.

Issued on August 23, 1904.

Conveyor.—Staunton B. Peck, Chicago, Ill., assignor to the Link Belt Machinery Co., Chicago, Ill. Filed Jan. 7, 1901. No. 768,296.

Grain Car Door.—Webster L. Shies, South Chicago, Ill. Filed Feb. 20, 1904. No. 768,346. See cut.

Issued on August 30, 1904.

Conveyor.—Isaac Christ, Tamaqua, Pa. Filed Dec. 12, 1903. No. 768,976.

Apparatus for Loading Grain Cars.—Edwin L. Adams and Andy C. Adams, Edgar, Neb., assignors of one-third to August Seover, Edgar, Neb. Filed Jan. 23, 1904. No. 769,126. See cut.

Issued on September 6, 1904.

Grain Car Door.—Edward Huber, Marion, and David L. Foster, Crestline, Ohio. Filed May 9, 1904. No. 769,609. See cut.

SALES OF RICHARDSON SCALES.

The following is a list of recent sales made by the Richardson Scale Co., 14-20 Park Row, New York:

Northwestern Consolidated Mills, Minneapolis; Washburn-Crosby Co., Buffalo and Minneapolis; North Star Malting Co., Minneapolis; Pabst Brewing Co., Milwaukee; Star and Crescent Milling Co., Chicago; Albert Dickinson Co., Chicago; Illinois Steel Co., South Chicago; City of Chicago, 9 scales; C. Turner Co., Chicago; Holzman-Bennett Grain Co., Grant Park, Ill.; Nobbe Bros., Farmersville, Ill.; J. B. Walton & Son, Champaign, Ill.; Indiana Milling Co., Terre Haute, Ind.; East St. Louis Cotton Oil Company.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

BAGS FOR SALE.

10,000 second-hand, 2-bushel grain bags, 10,000 140-pound export flour bags, 5,000 5-bushel oat bags. Cheap.

WILLIAM ROSS & CO., 57 So. Water St., Chicago, Ill.

BEST BIDDER GETS IT.

Regards our Canadian lands, quite a number have examined same of late. We are going to sell and the best bidder gets it. It is the choicest and cheapest land on the market, so if you want it act quick. Address

W. R. MUMFORD CO., 428-30 Rialto Bldg., Chicago, Ill.

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Elevators for sale in Kansas. Address
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Capacity 10,000 bushels, located at West Concord, Minn. Good crops. Address
C. W. FAIRBANK, West Concord, Minn.

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A good paying elevator, produce and feed business in good Iowa town for sale cheap; easy terms. Address

BOX 427, Marengo, Iowa.

FOR SALE.

Elevator, feed, seed, hay and coal business at one of the best stations in the "Arkansas Valley." Good crops and a sure money maker. Owner has to sell on account of his health. If you mean business address

J. A. KYLE, Granada, Colo.

FOR SALE.

New, up-to-date elevator in best grain district in Northern Indiana. Capacity, 35,000 bushels. Flour, feed and coal business in connection. Doing splendid business. Net profits will pay for entire plant in less than three years. Address

BOX 15, Argos, Ind.

SCALES

A RAILROAD TRACK SCALE.

For sale, 100 tons' capacity, 50-foot platform, at a bargain; never been unboxed. Also one 6-ton Monarch Scale. Address

A. F. CHASE & CO., Minneapolis, Minn.

SCALES FOR SALE.

Scales for elevators, mills, or for hay, grain or stock; new or second-hand at lowest prices. Lists free.

CHICAGO SCALE CO., 299 Jackson Boulevard, Chicago, Ill.

MACHINERY**FOR SALE.**

One 2-inch Pickering Governor; good as new; cheap. Address

A. H. RICHNER, Crawfordsville, Ind.

FOR SALE.

One 30 H. P. Witte Gasoline Engine, nearly new; with all fittings; cheap.

B. F. GUMP CO., 53 S. Canal St., Chicago, Ill.

FOR SALE.

A No. 1 Little Victor Cylinder Sheller, only used six months. Also a 14-inch Vertical French Burr, \$25 each f. o. b. here. Address

EMIL BRUNNER, Hope, Kan.

FOR SALE.

One Oliveys Sieve Scalper and Grader. Also one No. 2 Little Victor Corn Sheller and Cleaner combined. Both machines good as new.

J. M. HORNUNG, Greensburg, Ind.

FOR SALE.

At a bargain, one 15 to 17 horsepower Pierce Gasoline or Gas Engine with compressed air starter. In first-class condition; used but about six months.

HART GRAIN WEIGHER CO., Peoria, Ill.

FOR SALE.

Fifteen and 25 horsepower Atlas Engines and Boilers, complete plants; 8-horsepower portable gasoline, almost new. We sell or exchange new engines anywhere.

WALLACE MACHINERY CO., Champaign, Ill.

FOR SALE.

A Knowles Air Pump and Condenser, with Heater. Two iron band pulleys: 84 in. diameter, 21 in. face, and 6 3/4 in. bore; 72 in. diameter, 21 in. face, 3 15-16 bore. Your price. Address

THE EAST SIDE IRON ELEVATOR CO., Toledo, Ohio.

MACHINES FOR SALE.

One New Monitor Up-To-Date Oat Clipper for sale; capacity 3,000 bushels, 10 hours. Your price is mine, but not less than \$100, f. o. b. Also one new Sandwich Mounted Corn Sheller and Cleaner combined; capacity, 3,000 bushels per day. It cleans clean and discharges into car, wagons or sacks, and same with the cobs; long drag to draw corn to shelter. Will take less than \$200, f. o. b. It cost \$400. Address

H. G. TINKHAM, Latty, Ohio.

BARGAINS.

One corn belt feed grinder; almost new.
One combined oat clipper and wheat smutter.
One No. 2 1/2 combined Western Corn Sheller.
One piece shafting, 12 x 1 15-16 feet.
One piece shafting, 17 x 1 15-16 feet.
Two iron pulleys, 16 x 4 x 1 15-16.
One iron pulley, 24 x 6 x 1 15-16.
One wood-split pulley, 36 x 6.
One wood-split pulley, 26 x 6.
Seventy-five elevator buckets; sizes, 4 1/2 x 7; good condition.

R. TURNER & SON, Avery, Ohio.

Miscellaneous & Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

MAKE YOUR WANT KNOWN.

There are few mind readers and when you want to convey an idea to a grain shipper or receiver it's best to either put it in type or shout it at him. The "American Elevator and Grain Trade" reaches a large class of readers who will read your wishes if you have them put in type in these columns.

MACHINERY WANTED**WANTED**

Two or three second-hand hopper scales of 750 to 800 bushels' capacity. Address

HENRY HEILE & SONS, Cincinnati, Ohio.

MONEY IN YOUR POCKET.

If you want to change that second-hand machine into money advertise it in this department. Or if you have a grain elevator to sell or rent, or wish to buy, make your wants known through these columns.

GRAIN WANTED**GRAIN WANTED.**

Wanted—Feed barley and new No. 2 and No. 3 rye.

W. H. SMALL & CO., Evansville, Ind.

EXTRA FANCY WHITE OATS.

About 50,000 bushels wanted. If natural must test 37 pounds; if clipped, 38 pounds or better. Send samples, stating quantity to offer and price; also particulars relative to shipment.

BLUE GRASS COMMISSION CO., Lexington, Ky.

WANTED.

Five cars of timothy, clover, alsike, red top and Hungarian seed wanted. Mostly official prime grades. Send samples and prices. Shipment December, 1904, delivered here.

WM. F. CHICK, Bangor, Me.

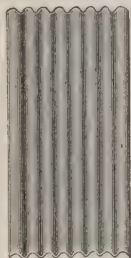
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WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and Metal Roofing For Grain Elevators

And take contracts either for material alone or job completed. Write us for prices. We can save you money.

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Capacity, 1,200 Barrels

C. H. DEMPWOLF, - York, Pa.

Mills For Sale

Having purchased the mills of the Eastern Milling & Export Co., I offer the same for sale.

C. H. Dempwolf, - York, Pa.

FOR SALE

THE LAKEVIEW MILL at Chambersburg, Pa.

Capacity, 200 Barrels

C. H. DEMPWOLF, - York, Pa.

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The Wm. S. Gilbreath Seed Co

WHOLESALE

FIELD SEED MERCHANTS

INDIANAPOLIS, IND.

Buyers and sellers of Field Seeds will do well to correspond with us; we handle in large quantities:

Red Clover, White Clover, Red Top, Hungarian, Kaffir Cor
Timothy, Alfalfa, Orchard Grass, Dwarf Essex Rape, Pea
Alsike, Blue Grass, Millets, Cane,

Send us your samples or ask for ours

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McLane, Swift & Co.,

Buyers
of

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Battle Creek,
Mich.

CORRESPONDENCE FROM EASTERN BUYERS SOLICITED.

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Commission Merchants

Grain, Feed, Hay, Straw, Etc.

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PHILADELPHIA, PA.

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Reference: Centennial National Bank

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REFERENCES: Manufacturers' National Bank, Philadelphia, Pa.
Union National Bank, Westminster, Md.

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T. J. STOFER

Alder & Stofer

COMMISSION
MERCHANTS

We do not buy any grain, but handle on commission, and solicit your Buffalo consignments.

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BUFFALO - - NEW YORK

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QUICK SALES. IMMEDIATE RETURNS. RELIABLE REPORTS.
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CONSIGNMENTS SOLICITED.

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GRAIN, HAY AND STRAW.

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always wanted

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Liberal Advancements made on Consignments

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OUR SPECIALTY: RECLEANED ILLINOIS SHELLED CORN
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29 Chamber of Commerce

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We sell on Commission and buy direct.

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Storage capacity 8,000 bales, 30,000 bushels
Let us know what you have to offer.

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Unlimited storage capacity for grain and seed. Storage capacity, 6,000,000. Unloading capacity, 300 cars daily.
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MEMBER CHICAGO BOARD OF TRADE.

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Your interests are our interests.

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Grain and Field Seeds Commission Merchant

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TIMOTHY, CLOVER, FLAX, HUNGARIAN MILLET

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Your questions fully and cheerfully answered; particular atten-
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ESTABLISHED 1861

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Adjoining Board of Trade CHICAGO, ILL.

Consignments Solicited Correspondence Invited

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Commission Merchants

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CHICAGO

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RUMSEY & COMPANY

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Every Department Fully Manned by Men of Ability and Long Experience

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FUTURES OF GRAIN, SEEDS AND PROVISIONS
BOUGHT AND SOLD ON MARGINS

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SUCCESSOR TO
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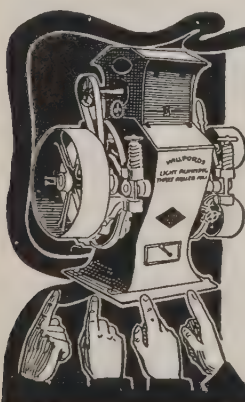
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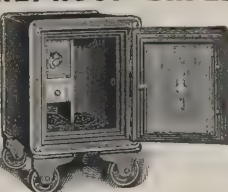
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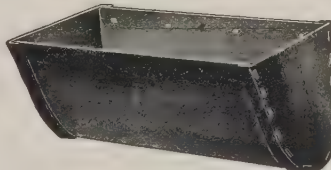


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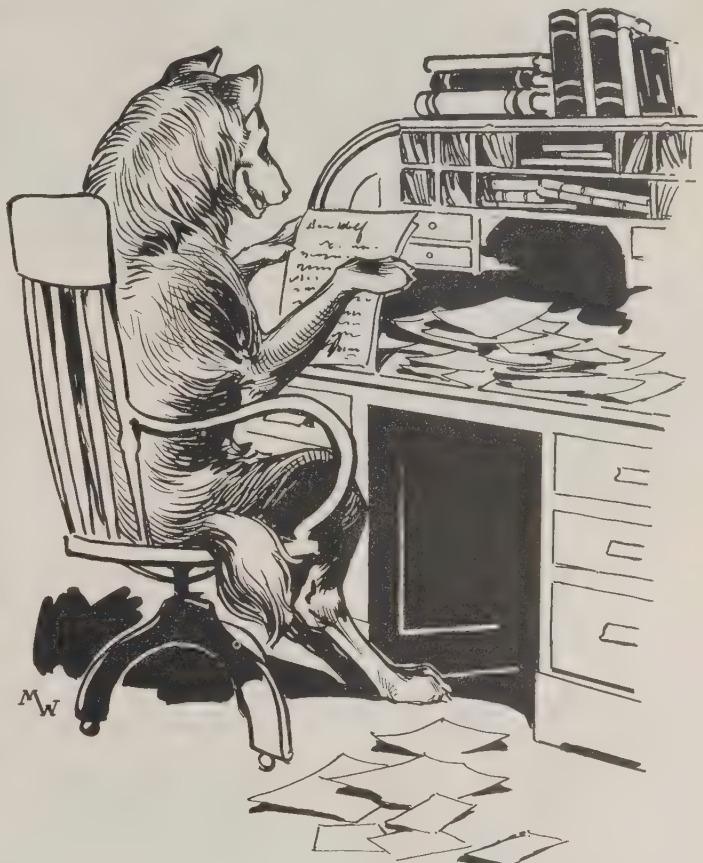
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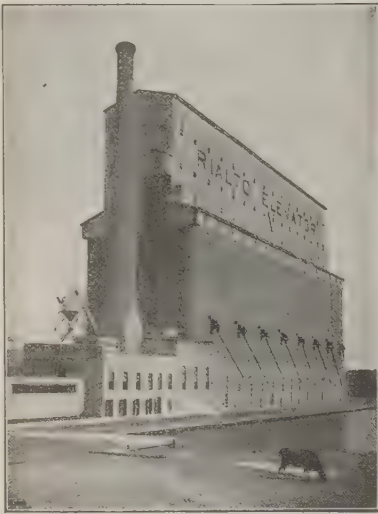
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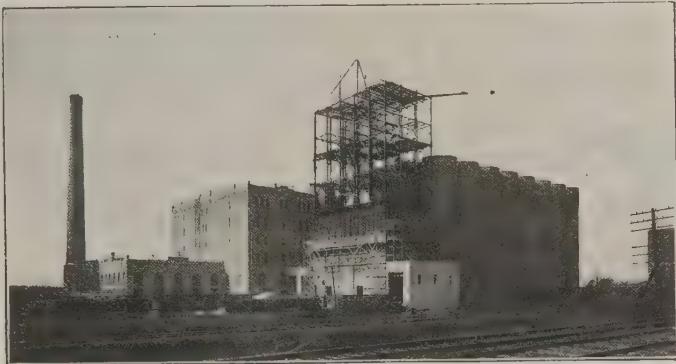
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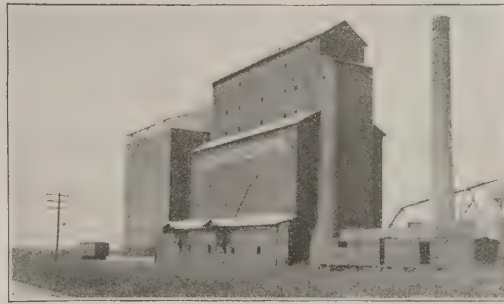
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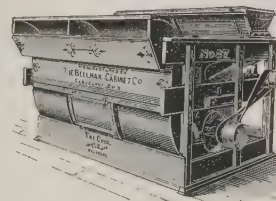
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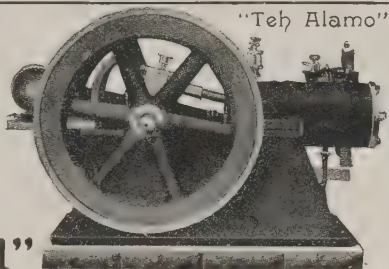
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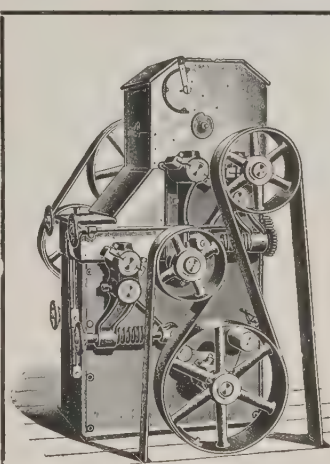
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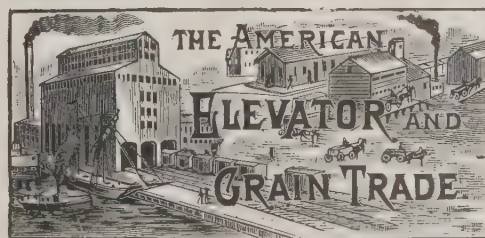
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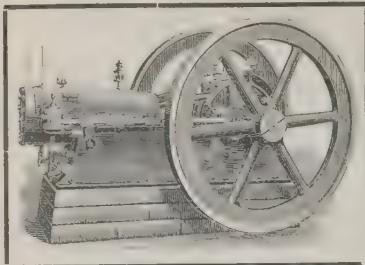
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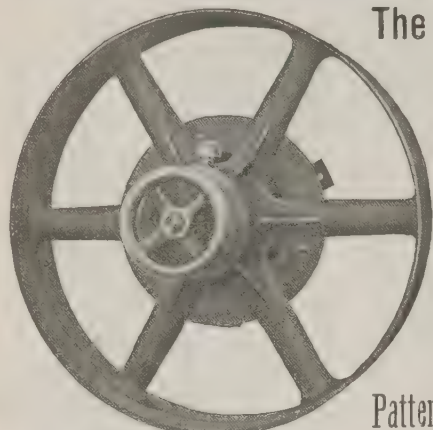


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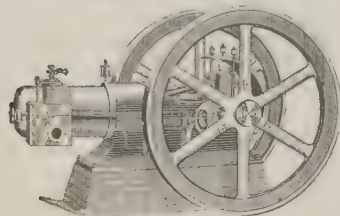
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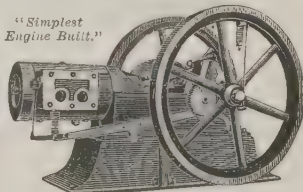
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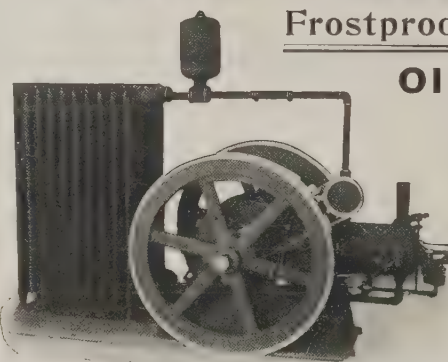
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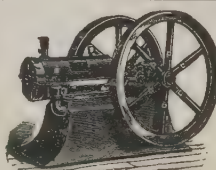
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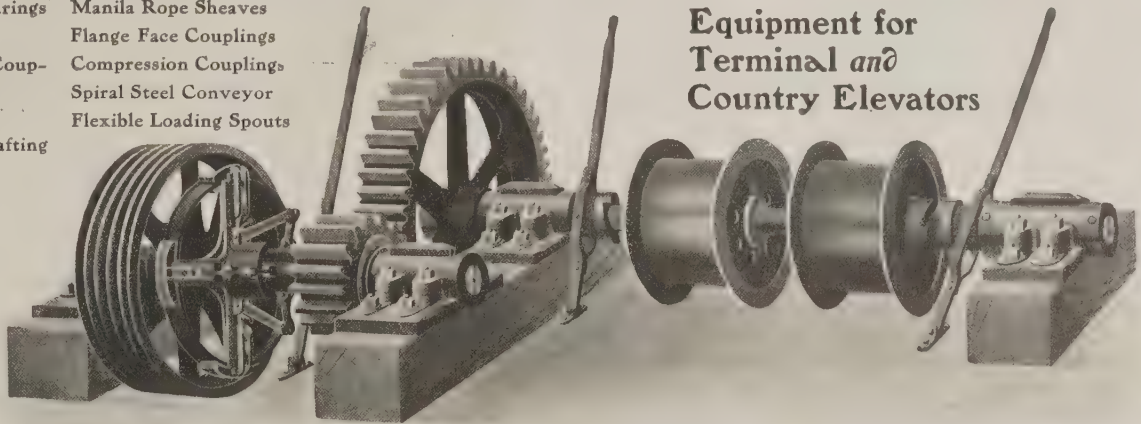
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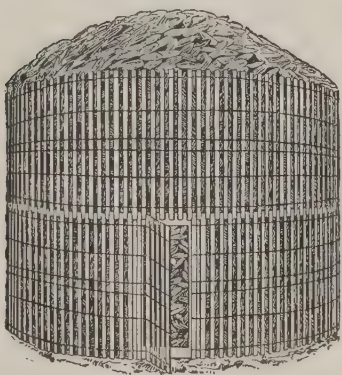


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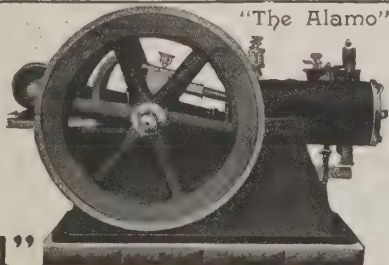
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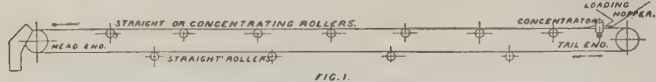


FIG. 1.

Fig. 1.—Level or inclined conveyor using either flat or troughed belt. Receives material at one end and discharges at the other.



FIG. 2.

Fig. 2.—Level or inclined conveyor, using either flat or troughed belt. Receives material at one end and discharges by means of tripper at any intermediate point.

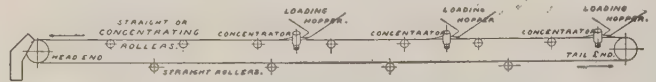


FIG. 3.

Fig. 3.—Level or inclined conveyor using flat or troughed belt. Receives material at any intermediate point and discharges at end.

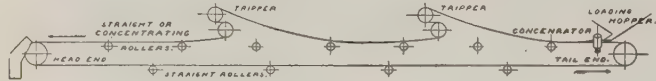


FIG. 4.

Fig. 4.—Level or inclined conveyor using flat or troughed belt. Receives material at one end and discharges at fixed intermediate points by means of stationary trippers. The best elevators use S.-A. Belt Conveyors. If you want the latest improved Conveying Machinery write us.

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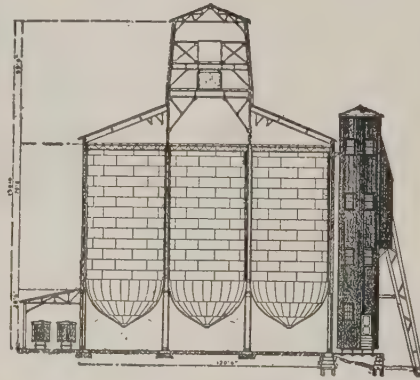
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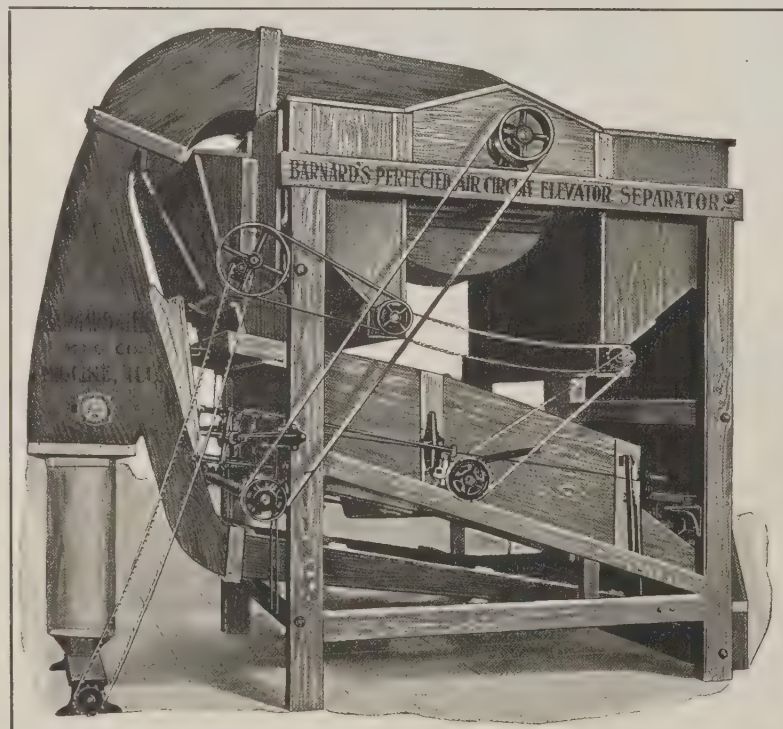
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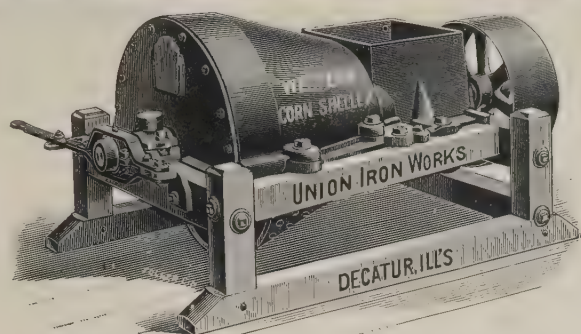
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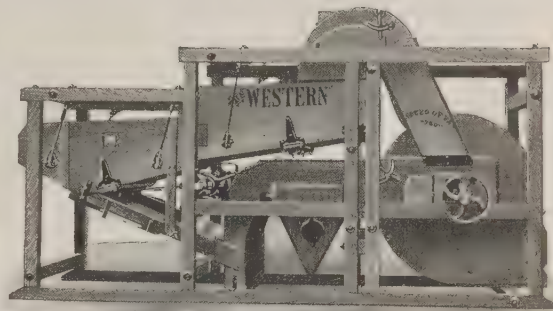
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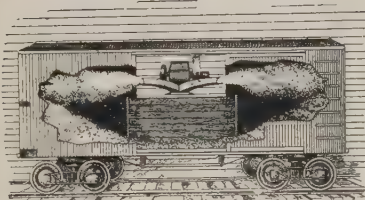
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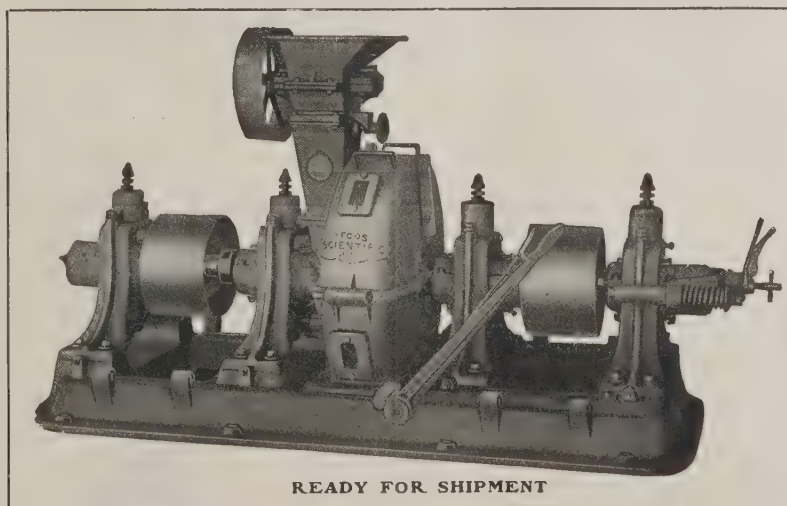
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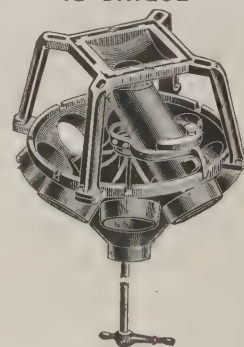
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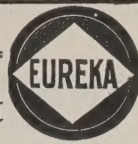
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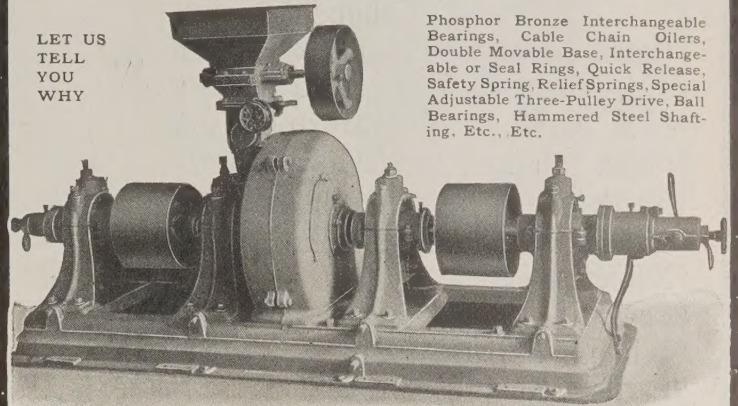
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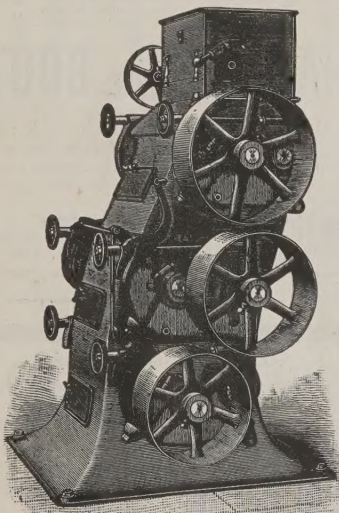
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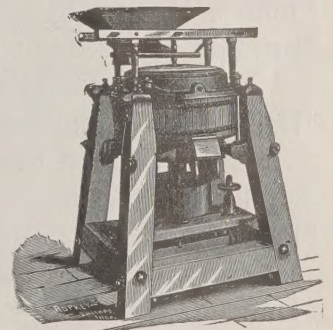
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*Updike Grain Co., - Omaha, Neb.

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*Duff Grain Co., - Nebraska City, Neb.

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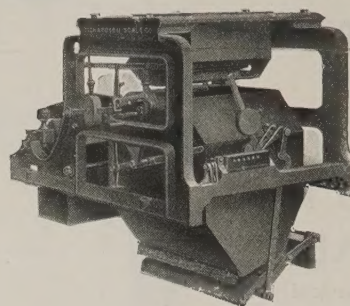
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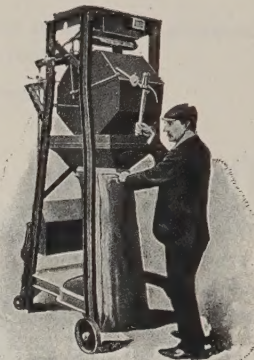
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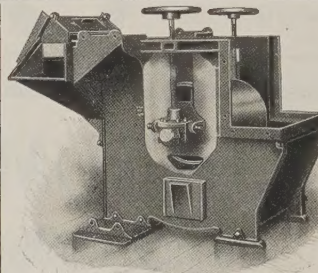
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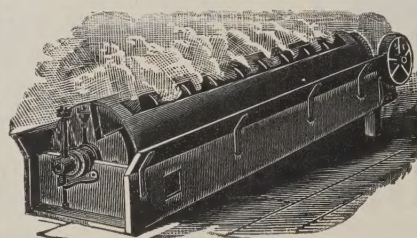
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will run with every cup heaping full and never choke with **Shelled Grain**, and will require no attention whatever (being automatic), if supplied with sufficient grain.

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It leaves the Wheat in Perfect Condition for the Rolls. Will also dry
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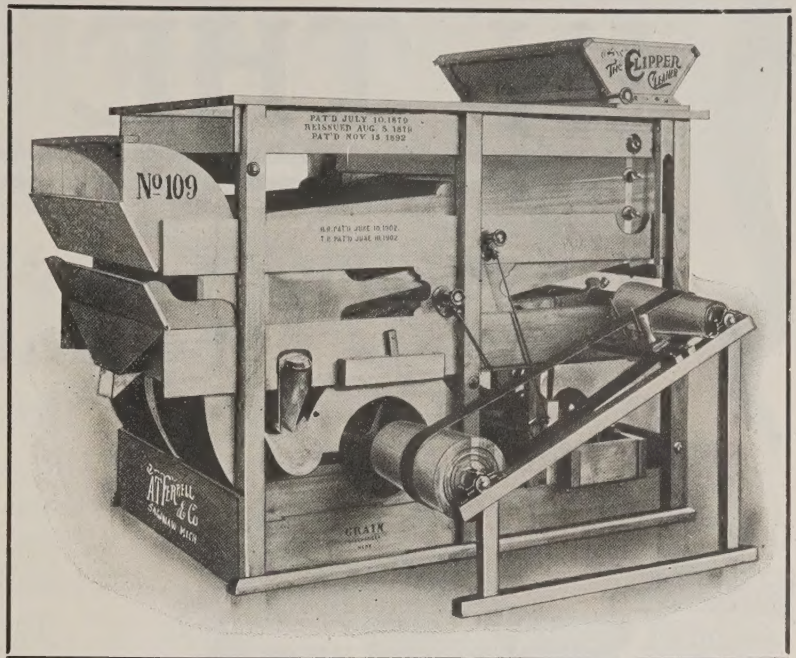
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OUR Traveling Brush device is the simplest, strongest and best made. Strong fibre brushes are made to travel back and forth across the under sides of the screens, thoroughly brushing them and freeing the perforations from any grain or seed with which they may become clogged, making it impossible for the meshes to fill up.

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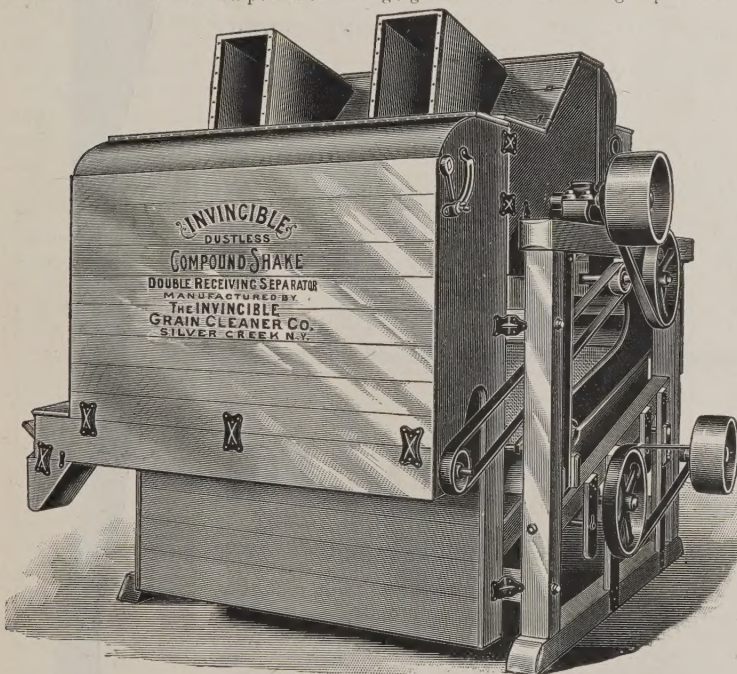


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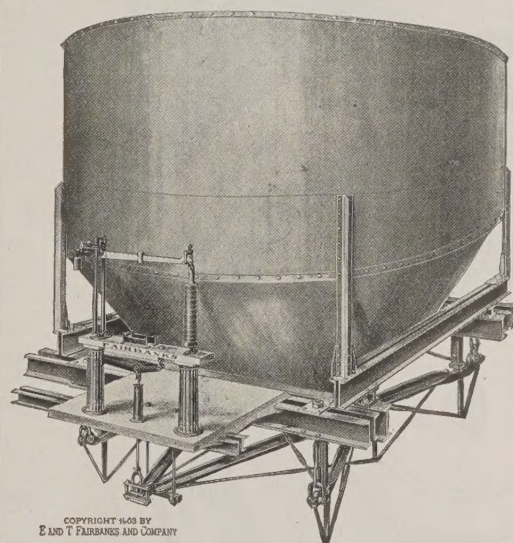


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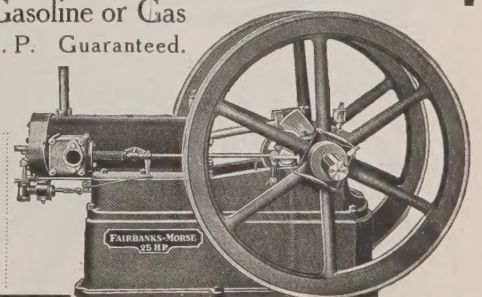
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